THE LANCET

SPECIAL SUPPLEMENT

IN SUPPORT OF THE

METROPOLITAN HOSPITAL SUNDAY FUND

Published in aid of the Appeal to be made on Sunday, June 17th, 1906.

THE TRIBUTE OF THE CLERGY AND MINISTERS TO THE WORK OF THE HOSPITALS.

FOR many years we have endeavoured to tell the tale in our own words of the great and pressing claims of the Hospitals of the Metropolis upon the sympathy and the practical support of the public. We know that we have done so with some success, but we know also that the needs of the Hospitals still remain unrevealed to an enormous public. This year we have asked some of the Clergy and Ministers to tell the tale to the members of their congregations in their own words, with what will, we trust, prove to be greater success.

The tale must be the same whoever tells it, or whatever the form of words used. But as the Minister of the place of worship welcomes the Special Preacher to give the same Message to his people with the hope that it will receive the greater attention from the lips of the visitor, so we hope that the Special Preachers in THE LANCET Supplement will ensure for the cause this year a more direct and personal interest and attention than may have been aroused heretofore.

With this object in view we addressed a letter to some of the Clergy and Ministers whose congregations last year sent their offerings to the Metropolitan Hospital Sunday Fund, pointing out that we were anxious to bring home to our readers, in as forcible a manner as possible, the excellent work done by our Hospitals and kindred Institutions, and stating our belief that it would very greatly help us if the clergy and others who are in the habit of addressing their congregations each year on behalf of the Hospital Sunday Fund would bear personal testimony to the great benefits derived from the Hospitals by the sick poor.

Considerations of space preclude our giving more than a brief sentence from each of the many interesting replies which we received; some did not lend themselves to such curtailment, and are therefore not recorded; and some reached us too late to be dealt with. It may well be said of those we now print that they are eloquent in their brevity; they use no embroideries to adorn the story they have to tell. They all with one accord point to the "Palaces of Pain" as having the greatest influence for good in the greatest city of the world, without whose ever-open doors for the reception of the sick and suffering the work of the Clergy and Ministers would be well-nigh impossible. Last year the Ministers of religion obtained from the Hospital Sunday Fund no less than 17,000 letters for Hospitals, Convalescent Homes, &c., and nearly 7,000 orders for surgical appliances for their poor people. What these meant to the recipients we will not attempt to describe—the Clergy and Ministers are telling the tale this year, and in the telling of it they are appealing to a much wider audience than their own congregations.

To the wealthy they would say—

GIVE OF YOUR WEALTH.

To the poor they would say—

GIVE OF YOUR POVERTY.

To all alike they would say—

GIVE ACCORDING TO YOUR MEANS.

not grudgingly or of necessity, but cheerfully and as a duty you owe to your sick and suffering brethren.

MAY THEY NOT APPEAL IN VAIN.

The Clergy and Ministers now take up the tale:—

The Archbishop of Canterbury.

"No one who knows London and its needs can doubt how absolutely essential it is that our Hospitals shall receive increased support if the life of our community is to be in any measure what it ought to be."

RANDALL CANTUAR.

The Archbishop of Westminster.

"The Metropolitan Hospitals are doing an excellent work of charity and humanity, and deserve every support and encouragement."

✠ FRANCIS ARCHBISHOP OF WESTMINSTER.

The Bishop of London.

"It is impossible to over-estimate the benefits the sick poor receive from the Hospitals." A. F. LONDON.

The Bishop of Southwark.

"Everyone who, like myself, has had to go through severe illness as a patient in his own house must feel at I did the happiness of thinking that those who cannot

afford this receive in our splendid Hospitals the very best skill and care."

EDW. SOUTHWARK.

The Bishop of St. Albans.

"I have been connected with Hospitals all my clerical life, and cannot exaggerate their value. It would be nothing short of a calamity for them to be starved or straitened, and their support by voluntary contributions brings out all that is best in human nature."

EDGAR ALBAN.

The Bishop of Woolwich.

"No one who knows anything about the sick poor can doubt that thousands of lives are saved yearly and untold human suffering alleviated by means of the Hospital system."

J. C. WOOLWICH.

The Bishop of Kingston.

"Thank God for our Hospitals, the first fruits of Christianity."

CECIL KINGSTON.

The Bishop of Barking.

"The help given by the Hospitals to poor parishes in London-over-the-Border is simply invaluable."

T. BARKING.

The Chief Rabbi of the United Hebrew Congregations of the British Empire.

"I gratefully recognise the fact that in all the Metropolitan Hospitals my suffering fellow-believers are received and treated with all possible consideration."

H. ADLER.

The Minister of St. John's Wood Presbyterian Church.

"There is no charity which has stronger claims upon philanthropic and Christian people than the maintenance of those noble institutions the Hospitals."

J. MONRO GIBSON.

The Pastor of Harecourt Chapel, Canonbury.

"I could fill THE LANCET with reports of cases in which the Hospitals have been of untold blessing to the people."

CHAS. LEACH.

The Minister of the Wesleyan Methodist Church, Quex Road, Kilburn.

"The Hospitals of London are doing most excellent work among the poor. I know many who have been restored to health and vigour who must have died or have been incapacitated for life without their aid."

W. CORNELIUS JONES.

The Rector of the Church of the Sacred Heart, Kilburn

"Our necessitous and sick poor have largely benefited, and much distress has been relieved, and permanent good done, by our Hospitals."

JAMES O'REILLY.

The Minister of Harlesden Baptist Church.

"It is impossible to express in words the blessing the Hospitals are to thousands who could get relief in no other way."

BENJN. THOMAS.

The Minister of the Swedenborgian Church, Camberwell.

"I am pleased to bear testimony to the good work done for the sick poor in our Hospitals, and I can speak in the highest terms of the good treatment they receive, from doctors and nurses alike."

GEORGE W. WALL.

The Rector of Holy Trinity, Marylebone.

"There are scores of homes in this parish which would almost certainly have ceased to exist but for the beneficent work of the Hospitals."

E. GROSE HODGE.

The Archdeacon of London.

"The results of our Hospitals are almost miraculous. The poorest and humblest sufferer is treated with the same respect, attention, and concentration as would be bestowed on the greatest of Crowned Heads. The peace, faith, and hope inspired by the general atmosphere of the Hospitals are beyond all value in the cure of disease."

WILLIAM SINCLAIR.

The Rector of St. James's, Piccadilly.

"I do not know what our sick and ailing poor would do without our Hospitals. They save untold pain, they remedy distressing defects, they give hope and life when despair sets in and death threatens."

JOSEPH MCCORMICK, *Prebendary of York Cathedral.*

The Vicar of All Saints', South Lambeth.

"Every clergyman who works as I do amongst the poor is a daily debtor to the Hospitals. They are doing a splendid work in a very necessary field of labour, and I myself am grateful every week for the untold blessing which they are to hundreds of my suffering people."

ALLEN EDWARDS, *Canon of Southwark Cathedral.*

The Rector of Stepney.

"We who live here know many a man, woman, and child whose life has been saved by the Hospitals, where the best advice and the best care are offered as a gift."

ARTHUR E. DALTON,
Prebendary of St. Paul's Cathedral.

The Vicar of Christ Church, Lancaster Gate.

"The vast majority of cases of severe illness amongst the poor would be quite hopeless for proper treatment but for the work of the Hospitals."

FRANCIS GURDON.

The Vicar of St. Mary's, Soho.

"It would be quite impossible for the parish clergy to help their people in times of trouble unless they were able to obtain help from the Hospitals of London."

G. C. WILTON.

The Minister of Woolwich Tabernacle, and ex-President of the Baptist Union.

"What London would be without the Hospitals I dare not even try to think. I put them at the head as the greatest institutions for the alleviation of distress and misery.

J. WILSON

The Rector of St. Peter's, Walworth Road.

"The attitude of the poor towards our marvellous palaces of pain is that of thorough confidence and deep gratitude."

J. W. HORSLEY, *Hon. Canon of Southwark.*

The Vicar of St. John's, Walworth.

"Without the aid of the Hospitals, it would be impossible for the poor to obtain the help so sorely needed.

A. W. JEPHSON, *Hon. Canon of Southwark.*

The Charterhouse Missioner in Southwark.

"I have almost daily experience of the benefits conferred upon the people in this district by the Hospitals. No words of mine can fully express the extent and variety of those benefits."

HERBERT RIDLEY.

The Rector of Streatham.

"I am brought into almost daily contact with evidences of the immense benefits which Hospitals confer upon all classes of the community."

HENEAGE H. JEBB.

The Vicar of St. Alphege, Greenwich.

"In cases of serious accident or of operations the Hospitals are the only places where the poor can receive the treatment which they need."

S. MARTYN BARDSLEY.

The Pastor of Mildmay Park Wesleyan Church.

"Many poor people, young and old alike, of my church have much reason to thank God for the help they have received in their sickness and in their need from the Hospitals."

W. SPINK.

The Vicar of St. Andrew's, Westminster.

"I always feel that the Hospitals do the work Christ did among the poor and prove that the love He brought into the world has grown into a mighty force."

J. S. NORTHCOTE.

The Vicar of St. Matthew's, Brixton.

"It is impossible to express in words the immense good accomplished by the London Hospitals amongst the poor."

A. C. WALDRON.

The Vicar of Islington.

"In a great working-class district like Islington we are constantly brought face to face with the beneficial results of Hospital treatment amongst our people, and any curtailment of the privileges they afford would indeed be a calamity."

CHAS. J. PROCTER.

The Vicar of St. Andrew's, Peckham.

"Very great benefits are derived from the various metropolitan Hospitals by the very poor residents in my parish. What we should do without the ready aid of the Hospitals it is quite impossible to say."

WM. PHEASANT.

The Vicar of St. Anne's, Holloway.

"As Vicar of this large parish and in touch with so many working and labouring class people, I emphatically state that I cannot conceive what their sufferings would be if they had not the Hospitals to turn to in their severe need."

JOHN A. MAYO.

The Vicar of St. Thomas's, Camden Town.

"During 20 years' visiting of the sick poor in the Hospitals of London, I have felt increasing respect for the work of these noble institutions."

HUBERT HANDLEY.

The Pastor of Vernon Baptist Chapel, King's Cross.

"Our sick poor have been helped and received great good through treatment at the Hospitals."

D. H. MOORE

The Vicar of St. John's, Fitzroy Square.

"I regard the Hospitals as an absolute necessity to the working poor. Their homes are not adapted for dealing effectively with disease, nor are their resources sufficient to command first-rate medical advice."

J. J. COXHEAD.

The Priest-in-Charge, Enfield Lock, Middlesex.

"The Christian care of the sick poor in our London Hospitals, both bodily and spiritual, is of the most unselfish nature, doctors, chaplains, nurses, and officers all combining to give their best."

H. LAURENCE TAYLOR.

The Vicar of St. Philip's, Leyton.

"It is impossible to imagine what the conditions of existence would be amongst the poor sick folk in this parish if the results of the best medical science were not at their service. The amount of misery and suffering which our Hospitals serve to alleviate is incalculable."

R. ELLIOTT.

The Vicar of Christ Church, Battersea.

"It would be a terrible thing if ever the efficiency and scope of the good work done by the Hospitals was diminished."

E. A. CARTWRIGHT.

The Vicar of St. Paul's, Stratford.

"I gladly bear testimony to the value of our Hospitals to the suffering poor. We see much suffering even now, but what it would be without the help of the Hospitals I should not like to realize."

WM. H. FERGUSON.

The Minister of Grove Wesleyan Church, Stratford.

"I am profoundly grateful for the most valuable help afforded to the poor people of my congregations by Hospital treatment. Many have thanked me with deep feeling for the assistance they have received."

JOSIAH MEE

The Vicar of St. Stephen's, Upper Holloway.

"I have sent patients to a variety of Hospitals, and the assistance rendered in all cases was most beneficial."

JOSEPH KAHN.

The Vicar of St. Barnabas, South Lambeth.

"As Vicar of a parish of 10,000 people, I can testify to the great benefits derived by the poor from the treatment they receive at the Hospitals."

W. F. G. SANDWITH.

The Vicar of St. Stephen's, Hampstead.

"The many poor of this parish derive from the London Hospitals a most real benefit, and I am glad to have the opportunity of acknowledging our debt."

H. W. BATE.

The Vicar of St. James's, Plumstead.

"But for the Hospitals it would be quite impossible to cope with the sick poor in this large parish who need medical and surgical treatment. The value of their help is quite beyond estimation."

G. ASKWITH.

The Vicar of St. John's, Kilburn.

"In a poor parish of 12,000 people such as this, we should often be in despair if it were not for the Hospitals, without which many lives would be sacrificed and suffering would be increased."

GEORGE MARTIN.

The Minister of Oaklands Congregational Church, Uxbridge Road.

"I can testify to the admirable work done by the Hospitals. Multitudes who would otherwise be unable to receive any medical treatment are dealt with efficiently and kindly at these excellent institutions."

RODERICK G. DAVIES

The Vicar of All Saints', Stoke Newington.

"I hardly care to think of what many sick people I have known would have endured if there had been no Hospitals. The thought of such a thing is terrible."

H. B. COLCHESTER.

The Vicar of St. Saviour's, South Hampstead.

"I bear grateful testimony to the excellent work done by the Metropolitan Hospitals for the sick and suffering poor of my parish."

G. A. HERKLOTS.

The Pastor of New Court Congregational Church, Tollington Park.

"The lot of the poor would be much harder and their sufferings much greater were it not that at the Hospitals they are able to get the best of attention 'without money and without price.'"

HENRY J. PERKINS.

The Vicar of St. Clement's, Fulham.

"It would be impossible for the majority of working people in this parish to get adequate medical assistance for their various ills were it not for the Hospitals, which bring comfort and healing to many to whom these would otherwise be lacking."

RICHARD FREE.

The Vicar of All Saints', Whetstone.

"Amongst our poor are many cases of relief and restoration to health through treatment in the Hospitals. One of my parishioners suffering from typhoid could never have recovered without the care he received in the Hospital."

HENRY S. MILES.

The Vicar of St. Matthew's, Denmark Hill.

"The advantages derived by our sick poor from the Hospitals have been the means of prolonging the life and relieving the distress of hundreds who, otherwise, must have endured prolonged suffering or even death."

J. R. PORTE.

The Vicar of St. Martin's, Kensal Rise.

"Without the aid of the Hospitals it would be impossible for numbers of poor people in this district to obtain adequate medical attention."

A. M. HANLEY.

The Vicar of St. Saviour's, Pimlico.

"I can testify to the invaluable work the Hospitals have done for my poor and sick. What we should do without them I do not know."

HENRY WASHINGTON.

The Pastor of the Congregational Church, Burdett Road.

"I send scores of cases to the Hospitals during the year. What East London would be like, as regards pain and suffering, without them I dare not think of."

TOM WARREN.

The Vicar of Plumstead.

"It would be appalling to think of London without its Hospitals. It takes half the burden out of sickness to know they are there."

W. FALKNER BAILY.

The Vicar of Winchmore Hill.

"The London Hospitals are invaluable for our poor people: some are received at a few hours' notice for very serious operations, without which they must die, as they could not possibly be performed at home."

ARTHUR J. B. DEWDNEY.

The Vicar of St. James's, Walthamstow.

"We clergy here, with ninety acres of small houses and a population of fully 13,000, know people by scores who must have died in misery long ago, but who, thanks to the skill and care of the Hospitals, are alive and well."

F. W. VERNHAM.

The Vicar of Kentish Town.

"Hundreds of lives are saved every year by patients being removed to Hospitals, where the best of nursing and treatment are placed within the reach of the very poorest."

R. T. A. MONEY KYRLE.

The Vicar of Barking.

"What we should do without the Hospitals I tremble to think. The great bulk of my people sooner or later are thankful to enter one or other of the many institutions."

J. W. EISDELL.

The Pastor of Upper Holloway Baptist Chapel.

"I give from personal knowledge my testimony to the invaluable service rendered by our Hospitals during the past year. I have had in my own congregation three cases which have been successfully operated upon and nursed back to health."

J. R. WOOD.

The Vicar of Holy Trinity, Hampstead.

"During nearly eleven years' work in London the Hospitals have been of the greatest help to my poorer parishioners."

S. A. SELWYN.

The Vicar of St. Luke's, Hampstead.

"I do not know what we should do without the Hospitals of London. I have seen lives saved, and I know of men now at work who were consumptives."

JOHN SALWEY (jun.).

The Vicar of St. Augustine's, Bermondsey.

"It would be impossible to alleviate a tithe of the vast amount of suffering in this parish without the aid the Hospitals are so willing to bestow."

ALFRED E. LAIT.

The Vicar of St. Jude's, Grays Inn Road.

"It would be almost impossible to exaggerate the benefits derived from the Hospitals by the sick poor in parishes like this. Many lives are saved and many restored to health who otherwise would remain permanent invalids."

FRED. H. BOLINGBROKE.

The Vicar of St. Andrew's, Bromley.

"In this very poor East-end parish I have known many a case concerning which I have felt almost in despair. The Hospital has, however, invariably brought relief to the sufferer and often restoration to health."

E. L. FIELD.

The Missioner of Corpus Christi College Mission, Camberwell.

"What the Hospitals have done for the suffering poor in this district can never be estimated at its real value. The benefit conferred upon suffering humanity here is incalculable."

E. CRESSWELL GEE.

The Founder and President of the East London Mission.

"I can testify with the utmost confidence to the immense benefit the Hospitals have conferred upon the suffering mass with whom I have had to deal."

J. W. ATKINSON.

The Vicar of St. Peter's, Great Windmill Street.

"It is impossible to estimate too highly the beneficent work done by Hospitals and kindred institutions amongst people living in this congested district."

G. GOLDING-BIRD.

The Vicar of Holy Trinity, Tulse Hill.

"It is impossible to overstate the boon conferred on our poorer brethren by means of the Hospitals, and I do not know what they would do without them."

H. WOFFINDIN.

The Vicar of St. Matthew's, Victoria Docks.

"I desire to add my testimony to the inestimable boon conferred by the Hospitals upon our poor, and I cannot conceive what we should do without the help which they afford."

EDWARD F. EVANS.

The Pastor of East Hill Baptist Chapel, Wandsworth.

"I have known many cases where a life of pain and misery has been transformed into one of health and comfort through the agency of the Hospitals. Poor people greatly appreciate the help they receive, and have great confidence in the Hospitals."

W. TOWNSEND.

The Minister of the East London Synagogue.

"Without the Hospitals the work of ministers of religion would be hopeless and impossible among the poor of East London. The outlook would be hopeless for pastor and flock alike."

J. F. STERN.

The Pastor of Regent's Park Church.

"We could not do for the poor of my own church what we can now do if the Hospitals did not exist."

J. ROBT. WALKER.

The Vicar of St. Paul's, Grove Park, Chiswick.

"Without the ready and efficient aid of the Hospitals I do not know what we parochial clergy would do in necessitous cases among our sick and suffering poor."

NEVISON LORAINE.

The Minister of Ilford Presbyterian Church.

"Excellent work is done by the Hospitals in caring for the not a few cases of serious trouble that have arisen amongst the members of my church."

WALTER A. GALT.

The Vicar of St. Michael's, Walthamstow.

"In a large parish like this one is constantly brought into contact with those who through the beneficent work of the Hospitals have been given back to their homes and families where otherwise they must have died."

ERNEST B. CLARABUT.

The Vicar of St. Stephen's, North Bow.

"It is impossible to estimate the saving of human life and the restoration of hope which is daily taking place all over the metropolis by means of the great Christian and philanthropic agency of the Hospitals."

HENRY A. MASON.

The Superintendent of Claremont Hall, Pentonville.

"Working in one of the poorest districts of the metropolis, we are continually indebted to the Hospitals on behalf of our people, and should be quite stranded without them."

F. W. NEWLAND.

The Vicar of St. Philip's, Arlington Square.

"The benefit of the Hospitals to the sick poor is certainly too great for individual experience to gauge."

F. M. GREEN

The Incumbent of Christ Church, Harrow Road.

"With confidence I send my poor sick people to the care of the London Hospitals, knowing well what a great work is done in them to relieve suffering, to awaken hope, and to minister to spiritual needs."

A. C. DOWNER

The Priest-in-Charge of St. Anne's Mission, Highgate.

"Only those who are spending their lives amongst the poor can have even the vaguest idea of the blessing of free Hospitals to the poorer classes; and I dread to contemplate what they would do without them."

RICHARD H. PRING.

The Vicar of St. Dionis', Fulham.

"I regard the Hospitals and their work as being the greatest of all the means by which the sum of human misery is being gradually alleviated and reduced."

WILLIAM S. CARTER.

The Vicar of St. Stephen's, Lewisham.

"Our poor people return from the Hospitals full of praise and gratitude for the benefits and kindness they have received."

H. BARON DICKINSON.

The Vicar of St. Matthew's, Fulham.

"It is hardly possible to conceive the amount of unrelieved suffering that would exist in this huge parish of 20,000 of the poorer working classes were it not for the aid so efficiently rendered through the instrumentality of the Hospitals."

W. J. S. WHITTY.

STATISTICS OF HOSPITAL WORK IN LONDON DURING THE YEAR 1905.

TABLE I.—GENERAL HOSPITALS.*

N.B.—The figures referring to out-patients in these Tables represent the number of VISITS *paid by out-patients—*NOT *the* NUMBER *of out-patients.*

Name of hospital.	Hospital Sunday Fund award.	In-patients.	Relieved.	Cured.	Convalescent homes.	Remaining under treatment.	Died.	Out-patients' visits.	Accidents and emergencies
	£								
Charing Cross	1,401	2,485	1,328	893	191	152	229	64,470	10,385
French	439	790	90	615	172	52	33	13,591	872
German	713	1,789	504	1,052	412	109	124	73,719	2,649
Great Northern Central	1,306	2,170		1,796	91	147	227	80,578	16,538
Guy's	2,399	8,626		6,355	703	501	792	321,006	84,609
Hampstead General	279	417	—	—	—	29	32	7,560	723
Italian	249	843	183	567	45	42	16	44,196	351
King's College	1,611	2,469	883	1,093	206	182	210	42,158	6,077
London	6,769	12,857	4,806	6,184	1,708	700	1,360	571,667	15,719
London Homœopathic	629	1,132	358	535	59	82	54	44,438	1,387
Phillips' Memorial Homœopathic	43	137	23	101	5	7	4	2,679	17
London Temperance	962	1,257	389	693	34	88	108	24,066	16,712
Metropolitan	1,009	1,341	370	675	276	96	193	128,083	10,969
Mildmay	356	538	91	356	124	42	28	37,877	6,190
Miller Hospital and Royal Kent Dispensary	327	3 7	69	196	2	24	28	80,846	7,359
North-West London	629	631	95	426	27	42	48	44,699	7,052
Poplar	772	1,472	—	—	48	77	92	76,059	—
Queen's Jubilee	232	233		206	—	12	16	27,614	2,731
Royal Free	1,484	2,329		1,991	300	125	183	112,078	25,586
St. George's	2,292	5,135		4,212	1,378	313	384	103,024	16,269
SS. John and Elizabeth	380	251		250	60	68	17	—	—
St. John's, Lewisham	238	280	66	158	30	25	17	—	—
St. Mary's	2,981	4,298	1,319	2,564	341	237	397	128,396	23,063
Seamen's Hospital Society	1,746	2,484	613	1,407	60	228	153	96,052	—
The Middlesex Hosp. and Convalescent Home	3,253	2,993		2,193	873	262	212	113,553	24,616
Tottenham	742	1,269	236	757	—	68	174	71,228	11,117
University College	2,084	2,897	959	1,196	—	243	267	219,989	47,916
Walthamstow, &c.	148	472	56	339	9	35	40	11,572	1,332
West Ham	677	571	38	248	—	49	53	87,926	10,236
West London	1,247	2,471		2,136	—	120	215	102,967	10,423
Westminster	1,900	2,517		1,729	334	185	219	—	11,439
	£39,450	67,454	12,472	19,748	7,533	4,374	5,920	2,736,185	372,942
Estimated to supply omissions	—	—	9,088	13,670	338	—	—	c2,000	20,913
Total	£39,450	67,454	21,560	33,418	7,871	4,374	5,920	2,798,185	393,855

* We reproduce the term "General Hospitals" as employed by the Council of the Metropolitan Hospital Sunday Fund.

TABLE II.—SPECIAL HOSPITALS.

Name of hospital.	Hospital Sunday Fund award.	In-patients.	Relieved.	Cured.	Convalescent homes.	Remaining under treatment.	Died.	Out-patients' visits.	Accidents and emergencies
	£								
City of London for Diseases of Chest	1,199	774	720	—	—	134	54	67,062	—
Hospital for Consumption	2,612	1,529	1,438		—	307	101	61,744	—
Mount Vernon Consumption	998	1,086	—	—	—	150	36	—	—
Royal Hospital for Diseases of Chest	724	640	523		50	58	59	25,922	—
Royal National Hospital for Consumption	439	817	630	—	—	133	12	—	—
Alexandra Hospital for Hip Disease	422	180	6	73	1	97	3	1,500	—
Banstead Surgical Home	30	105	23	43	22	17	—	—	—
Barnet Home Hospital	53	44	19	6	—	12	1	—	—
Belgrave Hospital for Children	113	528	—	—	66	28	138	29,852	—
Cheyne for Incurable ,,	178	57	3	2	8	50	1	—	—
East Lond. Hosp. for ,,	1,069	1,567	470	800	317	102	395	89,702	4,977
Evelina Hosp. for Sick ,,	285	982	690		81		202	58,095	30,089
Home for Incurable ,,	95	45	5	—	—	33	1	—	—
Home for Sick ,,	154	268	232		95	50	8	4,456	3
Hospital for Sick ,,	1,496	2,873	—	—	401	133	328	109,776	1,445
Kensington for ,,	113	156	144		—	4	8	14,512	549
North-East. Hosp. for ,,	416	1,085	396	898	100	120	233	75,649	10,842
Paddington Green for ,,	380	767	241	325	137	37	92	58,037	1,550
St. Mary's for ,,	344	529	120	302		23	84	63,591	13,122
St. Monica's for ,,	83	133	104		—	20	9	—	—
Victoria Hospital for ,,	576	962	224	267	299	66	106	64,418	2,067
Victoria Home, Margate	48	92	59	15	—	46	1	—	—
Hospital for Hip Disease	53	67	—	23	—	37	1	—	—
British Lying-in	71	484	484	—	25	25	—	—	—
City of London Lying-in	103	611	—	610	8	28	1	19,517	—
Clapham Maternity	36	425	—	—	—	—	1	16,017	—
East End Mothers' Home	95	382	—	—	8	—	1	7,587	—
General Lying-in	65	614	—	—	—	—	1	20,590	—
Queen Charlotte's Lying-in	576	1,560	—	—	150	—	5	19,690	—
Chelsea Hospital for Women	396	787	683		178	46	16	9,964	—
Hospital for Women	446	888	365	382	89	55	21	15,778	—
Grosvenor Hosp. for Women and Children	143	329	118	188	—	15	9	14,733	—
New Hospital for Women	327	663	—	—	24	55		31,236	—
Royal Waterloo Hos. for Children and Women	238	185	85	96	6	22	19	29,746	—
Samaritan Free	511	508	77	398		34	11	14,062	—
Cancer	119	713	613		52	94	93	18,405	—
Middlesex (Cancer Wing)	234	149	—	—	—	44	76	468	—
London Fever	536	475	—	414	—	53	8	—	—
Gordon for Fistula	30	332	9	299	—	18	2	3,024	—
St. Mark's	238	600	25	542	—	28	5	4,710	—
National for Diseases of Heart, &c.	182	176	113	—	—	23	17	18,247	—
Female Lock	298	537	447	—	—	87	3	—	
Hospital for Epilepsy, &c.	102	141	—	—	—	27	8	12,985	—
National for the Paralysed, &c.	1,437	1,092	359	208	38	154	69	41,099	—
West-End for Nervous System	336	389	338	49	6	42	2	58,796	—
Central London Ophthalmic	198	352	344		5	13	1	30,488	410
Royal Eye	356	632	—	—	—	30	2	71,008	1,288
Royal London Ophthalmic	1,283	2,051	—	—	19	73	1	129,187	1,842
Royal Westminster ,,	202	692	683		—	23	2	37,000	—
Western ,,	90	349	—	—	—	7	—	27,443	—
City Orthopædic	196		—	—	—	—	—	—	—
National ,,	173		—	—	—	—	—	—	—
Royal ,,	152		—	—	—	—	—	—	—
Royal Sea Bathing Hospital	356	570	332	77	—	92	8	—	—
St. John's Hospital for Diseases of Skin	36	225	204		—	21	1	32,886	—
Western Skin	12	—	—	—	—	—	—	8,614	—
St. Peter's for Stone	89	365	354		—	11	20	41,756	—
Central London Throat and Ear	53	354	88	250	2	8	6	48,786	—
Hospital for Diseases of Throat	59	775	159	616	17	22	12	53,446	18
London Throat	40	563	578		1		3	18,787	—
Royal Ear	32	346	311	—	—	1	3	11,366	—
Royal Dental	293	—	—	—	—	—	—	50,911	—
National Dental	27	—	—	—	—	—	—	26,075	—
Estimated to supply omissions	£21,955	35,250	6,225	6,883	2,205	2,81	2,300	1,668,723	68,822
	—	651	6,989	9,651	203	170	—	35,428	1,413
Total	£21,955	35,901	13,214	16,534	2,408	2,983	2,300	1,704,151	70,235

TABLE III.—COTTAGE HOSPITALS AND CONVALESCENT HOMES.

Name of hospital.	Hospital Sunday Fund award.	In-patients.	Relieved.	Cured.	Convalescent homes.	Remaining under treatment.	Died.	Out-patients' visits.	Accidents and emergencies
	£								
Metropolitan Convalescent (Walton and Broadstairs)	772	4,674	1,958	2,559	—	152	5	—	—
Metropolitan Convalescent (Bexhill)	475	2,417	477	1,914	—	25	1	—	—
All Saints' ,, (Eastbourne)	475	3,393	1,072	2,163	—	119	4	—	—
,, ,, (St. Leonards-on-Sea)	30	266	—	—	—	8	—	—	—
Ascot Priory ,,	89	189	—	—	—	—	3	—	—
Brentwood ,,	12	—	—	—	—	—	—	—	—
Charing Cross Hospital Convalescent	101	470	469		—	11	1	—	—
Chelsea Hospital for Women Convalescent	47	284	283		—	15	1	—	—
Deptford Medical Mission Convalescent	30	171	—	—	—	—	—	—	—
Mrs. Gladstone Convalescent	109	673	—	—	—	—	—	—	—
Friendly Societies' ,,	107	1,077	—	—	—	—	—	—	—
Hahnemann ,,	47	196	145	8	—	29	—	4,285	—
Hanwell ,,	24	213	—	—	—	—	1	—	—
Hendon, Ossulston Home	66	572	—	—	—	—	—	—	—
Herbert Convalescent	36	475	225	184	—	52	2	—	—
Herne Bay (Baldwin-Brown) Convalescent	38	405	—	—	—	—	—	—	—
Homœopathic Hospital ,,	18	207	206	—	5	—	1	—	—
Hemel Hempstead ,,	66	364	83	256	—	16	1	—	—
Mrs. Kitto's ,,	59	361	—	—	—	—	—	—	—
Mary Wardell ,,	101	152	—	—	—	—	—	—	—
Morley House ,,	190	2,074	—	—	—	—	—	—	—
Alfred Bevan Memorial	261	—	—	—	—	—	—	—	—
Police Seaside Home	59	720	—	—	—	—	—	—	—
St. Andrew's (Clewer) Convalescent	119	780	—	—	—	68	4	—	—
,, (Folkestone) ,,	214	2,183	—	—	—	64	1	—	—
St. John's Home for Convalescent Children	38	389	—	—	—	—	—	—	—
St. Joseph's Convalescent	71	666	501	134	—	40	5	—	—
St. Leonards-on-Sea ,,	131	801	—	—	—	—	—	—	—
St. Mary's ,,	26	105	—	—	—	7	—	—	—
St. Michael's ,,	42	302	—	—	—	—	—	—	—
Seaside ,,	143	—	—	—	—	—	—	—	—
Fairlight ,,	24	166	—	—	—	22	2	—	—
Acton Cottage Hospital	71	218	28	170	—	7	19	4,725	1,000
Beckenham Cottage Hospital	103	282	29	228	—	12	13	—	94
Blackheath and Charlton Cottage Hospital	107	192	122	139	9	16	11	4,204	52
Bromley, Kent ,,	148	562	123	396	30	21	20	—	148
Bushey Heath ,,	48	142	13	111	1	11	3	1,461	—
Canning Town ,,	64	121	33	73	34	—	8	2,497	—
Chislehurst, Sidcup, &c., ,,	71	231	12	171	—	14	15	—	—
Coldash ,,	26	78	28	26	—	20	—	—	—
East Ham ,,	77	193	11	148	—	15	12	18,425	—
Eltham ,,	56	167	27	115	3	7	11	—	20
Enfield ,,	90	154	8	142	—	15	7	—	21
Epsom and Ewell ,,	72	102	14	71	14	6	4	—	18
Hounslow ,,	66	162	18	126	—	6	12	3,377	332
Dartford ,,	106	151	13	130	—	14	8	—	54
Kingston, Victoria Hospital	81	168	42	154	20	12	6	—	46
Mildmay Cottage Hospital	19	201	92	80	29	22	8	—	—
Reigate and Redhill ,,	137	563	33	319	—	31	12	—	124
Sidcup ,,	36	193	37	133	6	6	11	570	—
Tilbury (Passmore Edwards) Cottage Hospital	59	—	—	—	—	—	—	—	—
Willesden ,,	152	268	231		—	15	20	—	—
Wimbledon ,,	56	149	14	120	—	7	7	70	31
Wimbledon, South, ,,	55	207	11	177	—	7	9	—	113
Woolwich and Plumstead Cottage Hospital	62	100	30	52	5	6	7	—	43
Bolingbroke Hospital	297	592	73	434	—	29	56	27,014	6,073
Hospital for Invalid Gentlewomen	119	184	16	154	—	13	1	—	—
St. Saviour's Hospital and Nursing Home	120	139	37	85	—	10	5	—	—
National Sanatorium for Consumption	119	401	—	—	—	83	5	—	—
Invalid Asylum	53	212	56	125	8	23	—	—	—
Firs Home	24	60	28	—	—	19	13	—	—
St. Catherine's Home	30	41	25	—	—	12	4	—	—
Friedenheim Hospital for the Dying	368	149	20	—	4	44	102	—	—
Oxygen Home	39	98	10	57	—	21	—	—	—
Santa Claus Home	71	63	40	—	—	20	—	—	—
Free Home for Dying	154	74	25	—	—	23	44	—	—
St. Luke's House	143	95	18	—	—	20	54	—	—
Royal Mineral Water Hospital	59	1,128	1,058	40	40	148	2	—	—
	£7,376	32,604	6,811	11,193	208	1,363	541	66,628	8,169
Estimated to supply omissions	—	1,487	4,187	9,607	—	393	45	1,374	—
Total	£7,376	34,091	10,998	20,800	208	1,756	586	68,002	8,169

SUMMARY OF TABLES.

—	Hospital Sunday Fund award.	In-patients.	Relieved.	Cured.	Convalescent homes.	Remaining under treatment.	Died.	Out-patients' visits.	Accidents and emergencies
General Hospitals	£39,450	67,454	21,560	33,418	7,871	4,374	5,920	2,798,185	393,856
Special Hospitals	21,955	35,901	13,214	16,534	2,408	2,983	2,300	1,704,151	70,235
Cottage Hospitals and Convalescent Homes	7,376	34,091	10,998	20,800	208	1,756	586	68,002	8,169
Dispensaries	2,804	—	—	—	—	—	—	1,094,856	—
Total	£71,585	137,446	45,772	70,752	10,487	9,113	8,806	5,665,194	472,259

TABLE IV.—DISPENSARIES.

Name of dispensary.	Hospital Sunday Fund award.	Out-patients' visits.
Battersea Provident	£131	55,240
Billingsgate Medical Mission	76	11,809
Blackfriars Provident	24	6,412
Bloomsbury ,,	18	3,680
Brixton, &c.	66	25,978
Brompton Provident	24	2,556
Buxton Street	30	2,597
Camberwell Provident	99	93,275
Camden Town ,,	19	8,285
Chelsea, Brompton, and Belgrave	59	8,466
Chelsea Provident	17	2,766
Child's Hill ,,	20	—
City	59	18,850
City of London and East London	12	97,171
Clapham General and Provident	28	15,979
Deptford Medical Mission	28	19,868
Eastern	43	25,740
East Dulwich Provident	51	—
Farringdon General	59	10,758
Finsbury	53	30,967
Forest Hill Provident	50	5,332
Greenwich ,,	39	25,245
Hackney ,,	20	9,920
Hampstead ,,	71	41,447
Holloway and North Islington	59	11,428
Islington	75	52,592
Islington Medical Mission	49	7,358
Kensal Town Provident	18	4,491
Kentish Town Medical Mission	24	3,500
Kilburn, Maida Vale, and St. John's Wood	49	6,536
Kilburn Provident Medical Institution	57	23,111
London	17	—
London Medical Mission	128	16,383
Margaret street, for Consumption	21	6,350
Metropolitan	71	27,924
Notting Hill Provident	18	4,989
Paddington	34	9,428
Portland Town	17	—
Public	44	7,118
Queen Adelaide's	38	16,878
Royal General	27	11,948
Royal Pimlico Provident	59	30,966
Royal South London	62	13,344
St. George's and St. James's	64	2,870
St. George's (Hanover-square) Provident	36	2,273
St. John's Wood Provident	56	23,400
St. Marylebone General	56	12,744
St. Pancras and Northern	34	—
St. Pancras Medical Mission	25	2,860
South Lambeth, Stockwell, & North Brixton	47	10,334
Stamford Hill and Stoke Newington	71	37,042
Tower Hamlets	55	10,179
Walworth Provident	18	6,314
Wandsworth Common Provident	17	4,338
Westbourne Provident	21	7,373
Western	76	21,385
Western General	142	40,253
Westminster General	52	34,604
Whitechapel Provident	42	24,968
Woolwich ,,	24	—
	£2,804	1,016,644
Estimated to supply omissions	—	78,212
Total	£2,804	1,094,856

TABLE SHOWING THE RESULTS OF COLLECTIONS SINCE THE COMMENCEMENT OF THE FUND.

Year.	Totals.	Donations.	Year.	Totals.	Donations.
1873	£27,700	£1844	1889	£41,744	£3482
1874	29,936	1505	1890	42,814	3991
1875	26,396	1424	1891	45,330	9019
1876	27,042	1339	1892	41,512	4429
1877	26,082	947	1893	39,290	3652
1878	24,904	1199	1894	43,679	7717
1879	26,501	1130	1895	60,361	21,990
1880	30,403	1567	1896	46,035	5533
1881	31,856	1638	1897	41,003	3607
1882	34,146	2106	1898	40,397	3864
1883	33,935	1980	1899	53,504	15,310
1884	39,329	6410	1900	51 993	16,137
1885	34,320	2555	1901	54,731	18,343
1886	40,399	4817	1902	62,669	16,307
1887	40,607	4130	1903	64,975	15,766
1888	40,379	3090	1904	63,054	15,143
			1905	78,379	29,425

1884. Including £4500 from the International Health Exhibition.

1885, 1886, 1887. Including three donations of £1000 each from Dr. James Wakley, Editor of THE LANCET.

1891. Including £5000 from the late Duke of Cleveland, &c.

1894. Including a legacy of £5000 (less duty) from the executors of the late Mr. W. J. Whitaker.

1895. Including £10,000 from Messrs. Barnato and friends; £3400 from the Stock Exchange; £1000 from Lord Iveagh; and £1000 from Mr. J. B. Robinson.

From 1891 to 1896 Sir Saville Crossley, Bart., P.C., M.P., gave an annual donation of £1000, and since has divided his contribution between this Fund and King Edward's Fund.

1897. Jubilee year. H.R.H. the Prince of Wales started a Special Fund for Hospitals.

1899. Including £10,000 from Mr. George Herring, and £1050 from Mr. J. Lane Densham.

1900. Including a further £10,000 from Mr. George Herring, £1000 from Mr. Thos. King, and "F. H." £1000.

1901. Including a further £10,000 from Mr. George Herring, and £4000 from Sir F. Cook, Bart., M.P.

1902. Including a further £11,579 from Mr. George Herring, and £1000 from Mr. Charles Morrison.

1903. Their Majesties the King and Queen, with most of the other Members of the Royal Family, attended at St. Paul's Cathedral. Including a further £12,332 from Mr. George Herring.

1904. Including a further £11,926 from Mr. George Herring.

1905. Including a further £12,400 from Mr. George Herring, and £12,500 from the executors of Mr. F. W. Cook.

**** *In the preparation of the voluminous statistics of hospital work which have been here digested and exhibited in collected form (and which have been specially supplied to us in response to our applications, and are quite independent of any returns made to the Metropolitan Hospital Sunday Fund Committee), we have been greatly indebted to a large number of secretaries and other officers of the various medical charities of the metropolis. To them we desire, as on many previous occasions, to tender our sincere thanks.*—ED. L.

THE METROPOLITAN HOSPITAL SUNDAY FUND.

Receipts and payments for the year ending October 31st, 1905.

Dr.

1905.	£	s.	d.	£	s.	d.
To Balance at Bank of England, 1st Nov., 1904	2,916	18	7			
,, Balance in hands of Secretary	6	5	11			
				2,923	4	6
,, Collections made at Sundry Places of Worship	48,954	2	1			
,, Collections at Schools	37	0	10			
,, Donations—City Appeal	1,298	17	2			
,, Donations	13,571	5	10			
,, Dividend on £224 12s. 2d. Consols	5	7	0			
,, One year's interest on Legacy of £10,000 from the late Herbert Lloyd	285	0	0			
,, Dividend on £45,346 1s. 3d. 2½ Consols, per Executors to the Will of W. A. Guesdon, deceased	1,133	13	0			
,, Interest on Deposit	94	10	2			
,, Legacies—						
Executors of Wyndham Francis Cook, Esq.	£12,500	0	0			
Executors of John Cohen, Esq.	500	0	0			
	13,000	0	0			
				78,379	16	1
				£81,303	0	7

Cr.

1905.	£	s.	d.	£	s.	d.
By Awards to 149 Hospitals	66,994	1	4			
,, Awards to 13 Institutions	1,576	14	0			
,, Awards to 60 Dispensaries	2,804	17	6			
,, Surgical Appliances	3,512	9	11			
				74,888	2	9
,, Rent and Telephone	217	6	8			
,, Insurance	0	7	6			
,, Repairs	0	6	6			
,, Fuel, Lighting, and Office Cleaning	32	4	6			
,, Printing and Stationery	207	12	1			
,, Stamps and Postages	143	7	4			
,, Advertisements	494	9	6			
,, Salaries and Gratuities (including payment in advance)	1,236	1	6			
,, Pension to the late Secretary	250	0	0			
,, Special Appeal	712	8	8			
,, Sundries	5	2	6			
				3,289	6	9
,, Balance at Bank of England, 31st Oct., 1905	3,105	17	2			
,, Petty Cash	19	13	11			
				3,125	11	1
				£81,303	0	7

Audited and found correct, this 17th day of November, 1905.
(Signed) W. H. PANNELL & Co., *Chartered Accountants*, 13, Basinghall-street, E.C.

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The Bolingbroke Lecture

ENTITLED

SOME STRAY THOUGHTS UPON TUBERCULOSIS.

Delivered before the South-West London Medical Society on June 13th, 1906,

BY EDMUND OWEN, F.R.C.S. ENG.,

CONSULTING SURGEON TO ST. MARY'S HOSPITAL AND TO THE HOSPITAL FOR SICK CHILDREN, GREAT ORMOND-STREET, LONDON.

GENTLEMEN,—Together with the invitation that I should deliver the Bolingbroke lecture this year, came a notification from the honorary secretaries that they were sending me the last Report of your Society. And whilst I was trying to think of some subject on which I might venture to speak, it came into my mind that they probably had some definite reason for sending me that Report, and on the very first page I found it. In the opening paragraph your President is congratulating you upon the good average attendance of members at the various meetings of the society and of the sustained interest which has been taken in the proceedings. And he makes use of these words:—"One cause which contributes no doubt to this satisfactory state of matters is that the council has made an effort to obtain papers of practical, rather than of scientific interest, and to confine questions of ethics to discussions at the meetings of council." This, it must have been, which was to catch my eye. It was a hint that I was not to take up any ethical question. "Ethics" is apparently a new science, certainly it is one in which I have not taken exercise. Nevertheless, it must be an important one, for it has a section all to itself in the affairs of the British Medical Association, presided over by a representative, a distinguished and a highly judicial bench. I know practically nothing about this science. But, judging from what I hear, it is much more easy to profess than to practise. There ought to be no need in our profession to make a special study of it; nor would there be if its members would only try to follow that simple rule of conduct given in the course of a short, open-air sermon nearly 2000 years ago, to the effect that we should do to our brother practitioners just what, in similar circumstances, we should like them to do to us. And I take it that one object of the foundation of the South-West London Medical Society, as, indeed, of every like society, is that by the assembling of ourselves together we may the more clearly keep this ideal before us, and may thus find its practice the more easy. Also that by acquiring a better personal knowledge of our professional neighbours, we may learn to hold each other in increasing respect, and be the more ready to forgive misunderstandings, and to forget them. And if I am to do my best that this particular meeting of the society shall be as successful as the others have been, I am to try to offer you a paper "of practical rather than of scientific interest." Not, of course, that you or I would hurriedly pass by, or refuse to give a recognition of gratitude to, those who are patiently, devotedly, and hopefully working at the purely scientific side of our profession. We all respect the scientific workers in our midst. But in these days of physical hurry, of intense desire to offer the highest services to our patients, and (let us be quite honest in the admission) of anxious care to earn a livelihood, and, if possible, to provide for ourselves a modest old-age pension, we are a little apt to overlook the fact that there are many of our brethren who, apparently caring for none of these things, are quietly working at the science of our profession from the pure love of it. Let us not forget them! Some, disciples of Pasteur and Behring, are silently and patiently plodding away in the not far distant Listerian Institute, whilst others, like Bashford and his associates, are laying siege to the dread foe of cancer. Some are occupied with the bacilli of tuberculosis, or with the cocci of septic disease—or with the two combined. Whilst others, travelling more or less upon the lines laid down by Manson and Ross, are investigating, and with most gratifying results, the problems of tropical affections. And of these there are some, as we know, who, carrying their life in their hand, in order to come to closer quarters with disease, are going into the heart of those countries where it is at its worst. And these various devout workers, because they deem it necessary to experiment upon mice and guinea-pigs, or on other beasts of the field which the Creator has placed not only under their feet but in their hands, are liable to be held up to public scorn and vituperation by men who, in the time of sickness, would unquestioningly avail themselves of any advantage in the treatment of disease which might in this way have been secured to us as practitioners. To say that such persons cannot be consistent is to put it too mildly; let us, rather, call them *mean*, and, in some cases actually *dishonest*, and having cast them on one side, let us salute with respect those who are attacking with scientific and determined energy these many problems of life and death. And for them, in the prosecution of their researches, let us admit and claim that there must still be, as there has been in the past, experimentation on what are disrespectfully called the "lower animals." To all these devoted and unselfish workers, then, in their various laboratories, let us offer a full measure of gratitude; let us assure them of our appreciative recognition of their services, and let us wish them "God-speed."

With my choice thus limited and directed, it came into my mind that I might do worse than adopt as my subject the treatment of Tuberculosis, taking a general survey of the question, from a 1906 point of view, and drawing from it certain deductions. I do not know where one should look to find the first mention of tuberculosis, but we are informed that Naaman the Syrian had a sharp attack of it, which ended in a remarkable and exceedingly happy way,—so far, at least, as *he* was concerned.

It has been said that every man, woman and child is more or less tuberculous; and as one goes on in his professional work with eyes and ears open, he is unlikely to declare that the saying is absurdly devoid of truth. Like most epigrams, however, it is not altogether true. But there is always an attractiveness about an epigram which atones for a certain want of truth—"Syphilis once, syphilis ever," is a good instance of this. But when one is dealing with some tardy manifestation of syphilis so late on that he might almost be justified in believing that time had long since blotted out the record, the crisp saying flashes across his mind, and he thinks it is quite true. But, thank God, it is not true. Nor is it true that we are all "more or less tuberculous."

THE LIABILITY TO TUBERCULOUS INFECTION.

For an individual to be tuberculous three things are necessary—there must be the lurking bacilli, the implantation of the bacilli, and the suitability of the individual for the cultivation of the implanted bacilli. Similarly, there are three points whence attack may be made upon this preventable disease, and under the influence of public opinion, enlightened by modern teaching, excellent advance has of late been made from each point.

In the first place, the individual himself is being steadily and surely improved, and thus rendered less vulnerable. As a ratepayer, I admit that I am not in love with the County Council, but still I must claim for it that in the way in which it is taking care that all persons, rich and poor, shall be decently housed and shall have the utmost light procurable, that the air which they breathe shall be duly inspected and guarded, it is doing its best—and a great deal it is—to supply a favourable answer to the King's pertinent question concerning the prevention of preventable disease. The County Council is, I maintain, doing great things in this direction. But there is plenty yet for it to do, and why it should not be absolutely progressive in its good work, I fail to understand.

To you who are practising in this south-western suburb, it must be a matter of constant observation that when the lease of some fine old family residence expires, a notice appears to the effect that the property is for sale. Charming associations with the time of Queen Anne or the early Georges are forthwith to be effaced. The venerable mulberry-tree, the cedar-tree, and the sundial on its stone pedestal, all of which you know so well, are to be ruthlessly swept away; the delightful old garden is to be trampled down by builders' labourers, and the lawn is to be made the dumping-ground for their bricks, lime, and scaffolding-poles. In short, this old-world spot is to be covered with residential flats. I do not ask that the County Council should say that such things

shall not be. But I do ask that it should exercise far more strictness towards the architects and builders who "run up" these flats than it has hitherto done. The construction of back-to-back houses has long since been forbidden, and rightly so; but I have no hesitation in saying that many of these towering blocks of residential flats are, from a health point of view, every bit as bad as back-to-back houses, and just as much in need of the watchful care and the strong fist of the County Council. Though the front windows of many of these flats are to make a bold show upon a street, the view from the back windows will be wretched and hopeless. For, separating the block behind, there is often but a deep, well-like space, as narrow as the ambitious landlord dare make it. He lines this well with enamelled bricks, and artfully throws into it a few gleams of light from silvered reflectors, in the hope of leading the would-be tenant to believe that the flat is an abode of sunshine and health. And young people who are about to marry are, in many cases, only too ready to believe that such buildings are sufficiently light and wholesome. We know that they are neither. If the parents take the front rooms and, by chance, it happens that children arrive in the flat, the nursery must be at the back. There is no alternative, for all the rooms are upon the one floor. The outlook from these windows is sad and saddening, children and domestic servants being the chief sufferers; and the worst of it is that the craze for these dark, stuffy, and unwholesome apartments seems ever on the increase. It is useless to argue that if flats are as bad as I have pictured they would remain on their builders' hands; unfortunately, it is not so.

There is just now an excellent movement on foot in connexion with the prevention of tuberculosis in the way of tracing the disease to its home, and there dealing with it. And I greatly fear that, as time goes on, it will be found that the starting-point of many a case of tuberculosis is the dark, ill-ventilated room at the back of the flat, which, under compulsion, I have called the "nursery."

The County Council is equally thoughtful, well meaning, and extravagant, and it does some things to perfection, as witnesseth your lovely park of Battersea—full of attraction not only for the President of the Local Government Board but also for the peace-loving Minister of Education. Local government there must be, and education is, I suppose, more or less necessary. But far more important for our country than either local government or education is the health of her children. A Minister of Public Health we have not at present, though we are certain to have one in due course. And, when he is appointed, let us hope that he may be permanently placed, free of political parties and of party fetters. Let him be a statesman rather than a politician. But, above all things, let him be a strong man, strong enough to deal effectually with such questions as the prevention not only of tuberculosis, but of small-pox, and of enteric fever, and of every other form of preventable disease.

If the ratepayer is not altogether in love with the County Council, what is his feeling as regards the School Board and the share of work which it is taking towards the physical improvement of the individual and, therefore, towards the rendering of him less susceptible to tuberculous infection? Well, I confess that when I see the School Board ambulance wagon on its morning round, filling its shelves with flat-laid crippled children, or taking them home again after their day's schooling, most of the unfriendly feeling which I have for the School Board melts into thin air! And, surely, if these children and their little friends are being taught nothing more than the need of having windows open, the wrongness of all things which are not right, and other bare essentials which make for the gospel of health, they are learning a valuable lesson in the science of nature. And this much is, I think, about all the *physiology* which School Board children need be taught. If the child is made clearly to understand that soap and water are good for his health and strength, and that cigarettes, and beer and wine are harmful, the School Board is doing a great deal towards the prevention of the preventable disease in question. And if only the educational problem were less in the hands of male and female "cranks," the practical output of our schools would be far higher. You may, perhaps, have heard of the plasterer's daughter who, having passed out of the board school, thought she would like to become a kitchen-maid in the squire's family, and, on being asked what her qualifications for the work might be, replied that she had certificates in literature, physiology, and freehand drawing.

TOWARDS THE PREVENTION.

Certainly one cannot in fairness accuse the Church of indifference in the great question of the prevention of preventable disease, when men like the Bishops of London and of Ripon are found tucking up their lawn sleeves, and lending strong and willing hands in the work of improving the physical well-being of the people. By mentioning these two prelates I would not imply that they are alone in the good work. There are, one knows full well, many others on the episcopal bench and amongst the general clergy who are steadily plodding on in the belief that the body should be sound if the mind is to be healthy, and who would any day rather preach a sermon upon the vigorous, manly David—that very human individual—than try to draw a moral from vapid stuff of the "Dairyman's Daughter" type, which, half a century ago, at any rate, was much in fashion. Still, one cannot avoid the thought that the Church might do better if whilst she still continued to "specialise" in the treatment of the soul, she would show by her teachings that she takes an increasing interest in the health also of man's body. And if a preacher should be at loss for a text to justify his quitting the dull groove in which sermons mostly run, he might talk the matter over with some doctor friend, who would show him a score of passages which would vindicate his leaving from time to time the dry bones of doctrine, to attend to the living flesh and blood, of which the majority of his parishioners are made. Or the doctor friend might even agree to preach a lay sermon for him.

Altogether, one is right, I think, in believing that the prospect of the eventual triumph of Medicine over Tuberculosis is daily becoming more possible. Help seems to be pouring in from all sides. Let us not lose sight of the valuable work which is being done, not only by those Societies which make this disease the object of their direct attack, nor of ancillary Associations like that of St. John of Jerusalem, and of the National Health Society; for we may rest assured that their patient teaching in matters of domestic and personal hygiene is giving great assistance towards the improvement of the race, and thus rendering the individual less likely to yield himself a prey to the germs of the disease.

Nor must we ignore the fact that the spirit which has so widely influenced our boys and girls, men and women, to spend more and more time, and to take more and more exercise, in the open air, is distinctly making for health. There are, we know, some who think that all this is being overdone; but to them we would reply, "Yet better the excess than the defect"; and that it advantages the empire that it should have a rising generation of healthy "outdoor" men and women, rather than one of dyspeptic students.

Of the work which our own profession is doing towards the prevention of preventable disease, I need say nothing: every member of it being a missionary in the good cause.

SOME OLD TIME IDEAS.

Dr. Knopf,[1] in his book on Tuberculosis, tells how Hippocrates (400 B.C.) advised a combination of exercises and rest in the treatment of patients afflicted with that disease, feeling sure that by this means the individual would recover, if only the disease were attacked early enough. Celsus, in the first century of the Christian era, recommended tuberculous persons to go a sea-voyage, or, failing that, to live in the country; whilst our old friend Pliny the Elder placed his faith in the healing power of the sun, and of the air of pine forests. Galen, also, a hundred years later, taught that the first thing to be done was to get all tuberculous patients into the open-air. If he could come once more amongst us, (and, having got over the absurdly increasing difficulties of the preliminary examination in chemistry, physics and biology, had become a registered medical practitioner), he would take a place in the front rank when physicians were discussing the great sanatorium question, and, on hearing some disciple of Koch state that the disease was contagious, would probably reply, with uplifted finger, "Ah, I always told you so!" Those illustrious contemporaries Sydenham and Willis also knew a great deal practically about the treatment of tuberculosis, the one sending his patients to the French Riviera, the other advising them to take plenty of exercise in the open-air. And Boerhaave, a few years later still, made it a rule to get the patient right out of the locality in which he had contracted

[1] Alvarenga Prize Essay, 1899.

the disease—in every instance a most desirable move. For though in a certain measure the open-air treatment may possibly be carried out at home, still, a thorough change of place is most desirable, especially in starting treatment.

As to the contagiousness of tuberculosis, our French brethren, even at the end of the eighteenth century, could not have been much in doubt; for, quoting from de Longrois, Knopf tells of an incident at Nancy where the county council, or the asylums board of the day, had a bonfire made of the furniture and bedding of a woman who had died from consumption. (The woman had contracted the disease from a tuberculous bed-fellow.) And at about this time also, at Naples, a royal decree was issued ordering the isolation of all consumptives, and the disinfection of their personal effects. Failure to notify a case of tuberculosis entailed imprisonment, or even banishment. A strict regulation to a similar effect existed in Spain and Portugal; but, if I may judge from the little that I know of Spain, I doubt if this regulation was carried out with unfailing and impartial severity.

I will not say anything further in connexion with the past history of tuberculosis, but I will venture to call to remembrance the very wise remark made by our own King, when he said to those who were addressing him upon the importance of energetic dealings with the disease, "If preventable, why not prevent it?" And, as a fit pendant to this, I will quote the opinion of the great Pasteur, that it is in the power of man to cause all parasitic diseases to disappear from the world. In regard to tuberculosis the task is, doubtless, a heavy one, but, seeing how much good has been already effected by prevention-methods in respect to such diseases as yellow fever and malaria, one may be hopeful in that direction also.

SANATORIUMS—PERMANENT OR TEMPORARY?

Personally, I am inclined to think that the greatest good to the greatest number of tuberculous patients will not be secured by spending these vast sums of money on palaces of bricks and mortar. I would rather that the current of philanthropy found expression in the modest and comprehensive scheme of practical medical men than in the grand and ambitious one of the builders. But the public have become so much accustomed to every philanthropic outburst being associated with the erection of some gorgeous building, that it might seem out of place to urge that money could be better spent in small wooden barracks, or huts, than in solid, permanent sanatoriums. After lime-washed wooden houses had stood a certain length of time, they could be effectually dealt with as the bedding and furniture of the tuberculous woman were treated by the good people of Nancy. Change of environment is a very valuable health-measure. Boards, earth, bricks and mortar, stonework, paint, everything becomes germ-laden in due course. Poultry, even, do not flourish if their "run" is not shifted from time to time.

To turn back for a moment. In order to prevent this preventable disease we must take full advantages of the rays of the glorious sun, the greatest of all disinfectants; of the fresh air, as Celsus advised; of the pleasant terebinthine vapours from the pine-trees, as Pliny urged; of moderate exercises in the open air, as prescribed by our illustrious Sydenham; and of that master cleanser fire, on which the inhabitants of Nancy, wise in their generation, rightly placed their chief reliance.

NEW METHODS FOR OLD.

It is very apt to happen when some new scheme is being urged in connexion with the treatment of disease, that there is forthwith a general and almost blind acceptance of it, and, its virtues being over-stated, disappointment is the inevitable result. Every well-tried and trustworthy method has to make way for it. In this hurry the sense of proportion is lost. It is as if one is looking at an object through a high-power microscope: only a very small part of the object is seen, and every detail is greatly magnified. One has not yet forgotten that outbreak of enthusiasm in connexion with the Koch-treatment of tuberculosis—the rush of doctors and patients to Berlin; the booming in the daily papers; the crowding of the hotels; the excited hopes of disheartened patients—and the collapse. How the subject would have lent itself to the pen of the realistic novelist! But perhaps he would have contended that he had dealt sufficiently with that sort of thing in his description of the Lourdes pilgrimages.

HASTE AND PUBLICITY

The two factors which are apt to do most harm to our profession at the present time are haste and publicity—haste to get results, anxiety to publish them; haste to get results rather than anxiety to verify them—haste to publish results which have not been duly verified.

I am afraid that it will sound almost like an impiety when I say that I believe it would be to the benefit of our profession if no medical journal, paper, book or pamphlet were published for a complete year—nothing of any sort, medical, surgical, or allied. The whole business is overdone; there is no rest; no time for rest; no time for retrospection, and still less for introspection. There is quite enough literary produce to go on with. The clergy have the chance of enjoying periods of rest, of "retreat," retiring into the wilderness of quiet for a while; why could not we do the same? And I am sure that a year would not be too much. Of course we should be allowed to look after our practice during this period, but we should have a complete respite from things written. We should feel that there was nothing fresh for us to read, so that we were not wilfully neglecting opportunities of improving our minds. That there was not even the Saturday's LANCET for us. I trust that the Messrs. Wakley will not regard these expressions as calculated to damage temporarily or permanently their esteemed and impartial journal, or hastily conclude that the year's intermission of all medical publication would inflict too serious a blow upon the science and the practice of our profession. But, as it is, I am quite sure that not only is there too much medical literature to read, but that there is too much published, and a great deal of this bears the stamp of haste. I think that it is getting steadily worse, and I know that if, by way of punishment for these expressions of impiety, I were condemned to read a thousand pages of THE LANCET, I would certainly beg that I might take up my task in some of the old volumes—say of 50 years ago—rather than in those of the present time.

OVER-PRODUCTION IN MEDICAL LITERATURE.

If any think that I have outstepped discretion, and beg me somewhat to modify my demand—I will, at any rate, urge that the literary medical out-put be diminished by half. That before any "copy" is sent for publication it be read and re-read, weeded and purged until it is reduced by quite 50 *per cent.* That every medical man who writes a book should make it *small*, and render it a bare, a modest, and a precise record of his own experience. That the man who gives a lecture—Bolingbroke or otherwise—should keep his indulgent hearers as short a time as he decently dare, but always with an inclination to mercy.

I feel that I have ample grounds for saying that we do not want more medical literature for 12 months, and that we have quite enough to go on with. If anyone doubt this, let him visit the Library of the Royal College of Surgeons and cast his eye over the solid rows of crustacean books, still smelling of ink and glue, and the amorphous heaps of molluscous journals and pamphlets. For the ordinary individual to read a hundredth part of what is in them is out of the question, and to *attempt* to do it might not be to employ his time to the best advantage. It is impossible to keep abreast of the continuous output of surgical literature, and, speaking for myself, I would say that we have so far dropped behind that we shall never be able to make it up. But what a relief to think that, perhaps, after all, it does not much matter.

THE KOCH TUBERCULIN TREATMENT.

The illustrious Robert Koch, it will be remembered, introduced his tuberculin-treatment in 1890, at the Berlin meeting of the International Medical Congress. And, as a leading article in THE LANCET remarked, it was welcomed as "glad tidings of great joy."[2] "In some respects," the article continued, "the publicity given to his researches must be laid at the door of Professor Koch himself, whose announcement raised expectation to so high a pitch." This admonition was well timed. Injection of the fluid was to destroy the tuberculous tissue, not the *bacilli*. This was somewhat disappointing, for inasmuch as he had shown that tuberculosis was due to the presence of bacilli, what was looked for was a remedy which should both kill the bacilli and establish an immunity. To destroy the tissue caused by the bacilli and to leave the bacilli still operative, did not seem sufficient.

[2] THE LANCET, Nov. 22nd, 1890, p. 1107.

When an autocratic ruler finds the main streets of his metropolis blocked with masses of "heterologous tissue," such as tramcars, sledges, and telegraph poles, he does not content himself with removing the barriers, but ruthlessly destroys the agents by which those barriers were erected.

Koch hoped that by the injection of his fluid an immunity might be afforded, but this was found not to be the case. Unless the bacilli of tuberculosis could be destroyed, what was there in the Koch-treatment to prevent their being further disseminated?

The interest caused by Koch's pronouncement was rightly called a "sensation," and I think it probable that the work of no single individual member of our profession ever created so great an interest, not excluding Lister. Lister's work came out gradually—at any rate, it did not spring forth all in an hour. Not only was it carefully thought out, but it had been tried and proved on human patients over and over again before it was delivered as gospel. How different was it with the Berlin encyclical, and how different has been the outcome! If Koch's work had been based upon as solid a foundation as Lister's, it should have brought about results as boundless. Tuberculosis was to be cured by an injection—what a prospect was opened out to the countless thousands who are dying year by year of the white plague! Every medical man in the world has a personal interest in the discovery of a cure for tuberculosis, for almost every medical man has on every day of the year tuberculous patients under his care. These poor we have always with us, and if only the expectations formed at Berlin had been realisable, it might have been difficult to say who had been permitted to confer the greater benefit on mankind, Koch or Lister. And all the world would have continued to rejoice. For medical science admits the existence of no geographical boundaries, questions which concern the health of the people making the whole world kin. In the welcome which is given to any discovery of solid worth, the North Sea, the English Channel, or even the great Atlantic, narrows itself into a mere ditch, across which the outstretched hands of professional brothers are joined in congratulatory and friendly grasp! After the Berlin address Professor Koch continued his experimental work at the Charité Hospital, where Professor Leyden, who was chief of the department, became deeply impressed by the results obtained; for, in the following October, he said, "in view of the decisive and beyond-all-expectation happy turn which the therapeusis of consumption at present promises to take," the question of the establishment of special hospitals for tuberculosis was not further to be considered.[3] Would that Professor Leyden's estimate had proved correct! Is it not equally interesting and suggestive that the best results of any new method of treatment are generally recorded whilst that method is still in its infancy?

TYPES OF CASES OF SURGICAL TUBERCULOSIS.

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When an autocratic ruler finds the main streets of his metropolis blocked with masses of "heterologous tissue," such as tramcars, sledges, and telegraph poles, he does not content himself with removing the barriers, but ruthlessly destroys the agents by which those barriers were erected.

Koch hoped that by the injection of his fluid an immunity might be afforded, but this was found not to be the case. Unless the bacilli of tuberculosis could be destroyed, what was there in the Koch-treatment to prevent their being further disseminated?

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Here, may I turn aside for a moment to tell once more how the first reported cure of tuberculosis of the peritoneum was brought about? The case, which is historical, occurred about a quarter of a century ago, when an unmarried lady, 22 years of age, came under the care of Spencer Wells for the treatment of an abdominal swelling. Her abdomen was as large as that of a woman near the full period of pregnancy; it was distended uniformly by fluid which gravitated with each change of position. Taking all things into consideration, and looking at the appearance of the patient, Wells made the diagnosis of tuberculous peritonitis. Some months later the abdomen became more prominent; it was dull anteriorly in all positions of the body, and it was resonant in both flanks as she lay on her back. Moreover, on her taking a deep inspiration, a cyst seemed to move downwards from the epigastrium; so, doubting the accuracy of his first opinion, he made an exploratory incision. No cyst appeared, but much opalescent fluid escaped, and the whole of the peritoneum was seen to be studded with myriads of tubercles. Some coils of intestine were floating, but the great mass, all nodulated by tubercle, was fixed with the colon to the posterior abdominal wall. Nothing further was done; the wound was closed and dressed, and it healed in due course. The patient completely recovered, and she married; and when the illustrious surgeon heard of her, 22 years later, she was well.

Unnumbered cases of this sort have been operated on since Wells published this report, and a considerable proportion of them have recovered, notwithstanding the fact that they have undergone no injection treatment. Now, let

us suppose that at the moment when Wells opened that abdomen and found he had a case of tuberculosis of the peritoneum to deal with, some trustworthy experimental pathologist had turned to him and said, "I have in this syringe some serum which, if injected into this patient's muscles, will probably do her immense good—may even cure her," and that he had thereupon been allowed to carry out his method. The patient would still have got well (unless, indeed, she happened to be in "the negative phase,") and the effect produced upon Wells must have been enormous! He would have reported the case before a full meeting of the Royal Medical and Chirurgical Society, saying that a hopeless case of tuberculous peritonitis had made a marvellous recovery after receiving an anti-tuberculin injection; that he had never seen such a recovery. Congratulations would be heaped upon the surgeon, the pathologist, and the lady. But the leucocytes, which alone worked the cure, would not be mentioned. No one at the meeting would have given a thought to them, any more than a hungry boy would think of bees when eating a slice of bread and honey.

Professor Wright gives the caution that if too large a dose of the vaccine is used the protective state of the blood is dangerously lowered, "which will enable the bacteria to run riot in his system." To this very serious condition he applies the term "negative phase." And he says that its danger is "exemplified in the fatal results which have in some cases supervened on the inoculation of Koch's old tuberculin." We are further cautioned that if we expect the suitability of the patient for further injection treatment to be shown by clinical symptoms we may find that the warning is conveyed too late. As medical men, we are in the habit of directing our treatment almost entirely by clinical symptoms, so that this statement is of itself sufficient evidence that Professor Wright's method should be adopted only after the exercise of unusual precautions, and after the methodical examination of the patient's blood. It is certain that the ordinary practitioner will have much difficulty in determining just which cases should be treated by the injection, when the injection may or should be repeated, and when, the "negative phase" being on, it should be withheld. The question seems to be so full of difficulties that the field of usefulness must be restricted to those who have special experience in the methods of blood-examination. For my own part, I am afraid that I shall have to content myself with saying, in the words of the Psalmist, "Such knowledge is too wonderful for me; it is high, I cannot attain unto it."

The administration of tuberculin can never, I think, be a general method of treatment or one free from risk. As Knopf says, five or ten milligrammes of Koch's tuberculin may in 999 cases do nothing but reveal a latent tuberculosis; but in the thousandth case it may cause an unexpected generalisation with a fatal result. A drug which is capable of bringing about a sudden rise of temperature, sometimes as much as four degrees above the normal, and, perhaps, of inviting latent tubercles into activity, must surely be considered dangerous. I know this, that some years ago when I was using the tuberculin in a tentative manner I did it with a considerable amount of anxiety. Knopf says that in certain American sanatoriums small doses of tuberculin—much smaller than formerly recommended by Koch—are continually used, successes being reported, *especially in early cases*. And he asks if we might not be right in ascribing these good results just as much to the general measures which are adopted at the same time, and vigorously adhered to, in these institutions, where equally good results were obtained before tuberculin was ever used?

What is wanted in the treatment of tuberculosis, whether the lesion be in joint, skin, or lung, is a something which will enable the phagocytes, or other agents, to destroy the bacilli, and enable sound fibrous tissue to replace unhealthy granulations. Neither Koch nor Behring has yet supplied that something. Wright is hopeful that he has produced it, and when I say that we offer up the prayer that his hopes may be realised, I am sure that you join in a fervent "Amen." But probably there are other things than leucocytes which are concerned in the triumph of the tuberculous individual over the attack of the insidious bacilli. Probably there is a something in the liquor sanguinis which gives the start to, or completes the victory. Possibly there is in the individual some unknowable vital force of the existence of which neither physiologist, chemist, or pathologist has any suspicion, a something undreamt of in the most advanced philosophy.

THE DEDUCTIONS.

Several deductions may be drawn from the somewhat discursive remarks which I have had the honour of laying before you. One is that our treatment of tuberculosis has not always been progressive. Until the last few years, indeed, the medical profession in this country seems to have lost sight of principles which rightly guided our predecessors. Even up to quite recent times it has been very much the custom to shut up advanced tuberculous cases in under-ventilated and over-heated rooms, curtains being drawn, and crevices stuffed up, lest, by chance, a breath of fresh air might come near the wasted sufferer. And if ever he was allowed to go out into God's blessed sunshine, it was only after he had been smothered up in thick clothes and comforters as if he were a North Sea pilot preparing to face a December blizzard. Physical exercise of every sort was never to be so much as thought of—*he was to do nothing*.

Till lately, moreover, we had almost ceased to have any regard to the fact that tuberculosis is an infectious disease. It may be that our predecessors only *guessed* at its being infectious, but thanks to the great work of Koch, we now know that the guess was right. In the midst of the many dark uncertainties by which we are thickly surrounded, it is advisable for the medical man to guess and to keep on guessing. Imagination has in the past had a remarkably helpful influence in the building up of our professional knowledge in that it led to guessing. Dryden went so far as to affirm that all physic was but "a happy guess"; at the present day we should protest against so gross an assumption of poetic licence, even by a Laureate. The imaginative man encourages himself to guess: some of the guesses turn out right. But the pity of it is that when anyone has made a guess, which, after the manner of children, he reckons a "good" one, he and his friends are likely in their enthusiasm to insist that it is something better than a guess, and forthwith to work upon it, like the jerry-builder who founded a house upon the sands.

I am sure that you will agree with me when I say that no member of our profession has done more towards bringing together sound views, old and new, as to the nature and treatment of tuberculous disease, and focussing those views upon a screen where they must be seen and noticed by the public as well as by the guardians of the public health, than Sir William Broadbent. And those who know him know also that in his long-continued exertions in that direction, he has been influenced solely by the wish to do his share of the work towards finding a satisfactory solution of the Royal question, "Then, why not prevent it?"

Another deduction is that whilst we, as practitioners of the healing art should be ready to inquire into all remedies which we may deem likely to be advantageous to our patients, we ought to be careful not to think lightly of those which experience has shown us to be useful and trustworthy. It was in a local medical society such as this that the late Dr. Hare read his paper upon Good Remedies out of Fashion. There is room for someone to-day to write upon *sound theories which have been allowed to slip out of memory*. And in connexion with this he might ask first if the people of Nancy were right in burning the bedding which they believed to be infected by the tuberculous woman. And if the answer comes as a simple, "Yes," he might ask, in the second place, if the best way of treating an army of tuberculous people is by placing them in cheap, consumable barracks or in costly palaces. Personally, I do not pretend to be able to answer this question: I can only guess. Still, the right answer must have an important influence as regards the number of those who may be enabled to reap advantage from the attack which is being made to-day against tuberculosis, not only in your beautiful county of Surrey, but throughout the Empire—throughout the world.

The last deduction which I shall venture to draw is that we are to possess our souls in patience and in hope with regard to the issue of the fight against tuberculosis. But whilst listening to theories, and discussing measures, we must not allow ourselves to adopt an attitude of indifferentism or of therapeutic agnosticism. Critical we should be, doubting we may be, but agnostic we must not be. We should do our best to inquire into the merits of each particular scheme of treatment as it is introduced (unless, indeed, from its associations and methods of advocacy it is clearly but a form of quackery under thin disguise), and, having proved all things, there is small doubt but that we shall be content to hold fast that which is good.

A Series of Lectures ON APHASIA.

Delivered before the Royal College of Physicians of Edinburgh

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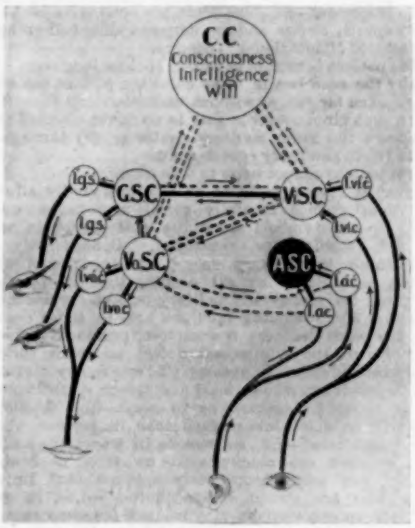
LECTURE III.[1]

DERANGEMENTS OF THE AUDITORY SPEECH MECHANISM; WORD DEAFNESS (CENTRAL, SUBCENTRAL, AND SUPRACENTRAL); PSEUDO-SUBCENTRAL AUDITORY APHASIA; TONE DEAFNESS.

MR. PRESIDENT AND FELLOWS,—Let us now look at the clinical symptoms which characterise the different varieties of auditory aphasia (word deafness). In order to simplify the study of this difficult and complicated part of the subject as much as possible I will suppose that the auditory speech centre is only active on one—the left—side of the brain and I will chiefly limit my description, in the first instance at least, to cases in which the symptoms are typical of the special variety of auditory aphasia under discussion and in which the word deafness is complete. It is unnecessary to say that these conditions are rarely met with in actual practice. At the bedside we comparatively seldom meet with cases in which the lesion is sharply defined and exactly limited to (*a*) the auditory speech centre itself; (*b*) to the part of the (cerebral) auditory speech mechanism below (on the afferent side of) the auditory speech centre—i.e., to the fibres which pass *to* the auditory speech centre; (*c*) to the fibres which pass from the auditory speech centre to the associated ("ideational") centres—i.e., to the fibres on the efferent side of the auditory speech centre. Consequently in many, perhaps in most, cases of auditory aphasia the clinical picture is a complicated one and the aphasic symptoms are comparatively rarely typical and exactly characteristic of the central, the subcentral, or the supracentral forms of word deafness respectively. Again, in many cases the destruction (of the central, of the subcentral, or of the supracentral parts of the mechanism) is incomplete and the word deafness is consequently only partial in degree. Further, in many, perhaps in most, persons the right auditory centre is capable of taking up and of carrying on, in some degree, the function of the left auditory speech centre when it (the "leading" or "driving" auditory speech centre) is completely destroyed; consequently, in persons in whom this is the case, complete destruction of the left auditory speech centre does not produce complete and permanent word deafness. These complicating conditions, to which others might be added, make it extremely difficult in many cases of actual disease to correctly interpret the clinical phenomena and to diagnose the exact position and extent of the lesion which is the cause of the word deafness.

The clinical characteristics of central (cortical or pictorial) auditory aphasia (word deafness).—In my experience well-marked auditory aphasia is, comparatively speaking, rare, much less frequent than visual aphasia for example. The central form is by far the most common form of auditory aphasia; its clinical features are for the most part well established and understood; but it is necessary to describe them in detail in order that the distinguishing features of the less common and less well-established forms may be appreciated. In this (the central) form of auditory aphasia the cell groups in which the memory pictures of auditory speech symbols (spoken words) are imprinted and stored are destroyed. Consequently, in those cases in which the destruction of the auditory speech centre is complete and in which the auditory speech centre is only active on one (the left) side of the brain, auditory speech symbols are, as it were, completely blotted out from the sensorium. The patient is unable to understand auditory speech symbols and is unable to make use of auditory speech symbols for internal speech and thought. The clinical features of this form of word deafness (which are diagrammatically represented in Fig. 18) are as follows.

FIG. 18.



Diagrammatic representation of the central form of auditory aphasia. The auditory speech centre (A.S.C.) is supposed to be completely destroyed, or, what amounts to the same thing, completely cut-off from all its cerebral connexions, except with the lower auditory centres (l.a.c. and l'.a'.c'.). The patient is unable to understand spoken speech and to name objects seen, felt, tasted, smelt, because the auditory speech centre is no longer in connexion with the centre C.C. and the centres for sight, touch, taste, and smell. Auditory speech symbols cannot be made use of for the purpose of thought and internal speech, unless the lesion can be compensated by the *right* auditory speech centre taking up and carrying on the function of the left auditory speech centre which is destroyed. Echoed speech may still, perhaps, be carried on through connexions passing from the lower auditory centres (l.a.c. and l'.a'.c'.) to the vocal speech centre (Vo.S.C.), or from the right auditory speech centre to the vocal speech centre. The action of the vocal speech centre will be more or less deranged unless it, the vocal speech centre (Vo.S.C.), can be stimulated, regulated, and governed by (1) the right auditory speech centre, or (2) by the centre C.C. acting *directly* on the vocal speech centre (along the dotted line from C.C. to Vo.S.C.) or *indirectly* on it through the visual speech centre (along the dotted line from C.C. to Vi.S.C. and from Vi.S.C. to Vo.S.C.). Reading and writing will be to some extent interfered with, unless the visual speech centre (Vi.S.C.) is in direct communication with the centre C.C. (as shown by the dotted lines passing between Vi.S.C. and C.C.).

1. The patient is not deaf; he is able to hear ordinary sounds and (?) to understand their meaning, for the lower auditory centre and (?) its connexions with the associated ("ideational") centres are (or usually are) intact.

2. The patient is not necessarily "*tone deaf*"—i.e., he may be able to recognise and differentiate musical tones, airs, and melodies.[2]

3. The patient hears words as ordinary sounds but does not understand their meaning; he is word deaf. If, for example, a series of articles (such as a knife, pen, pencil, key, &c.) are placed before the patient and he is *told* (verbally) to pick out one of them, say the knife, he is unable to do so; he no longer associates the word knife with the object knife. He does not understand the request and even if he should by means of writing or pantomime be made to understand the nature of the test (i.e., that he is

[1] Lectures I. and II. were published in THE LANCET of Jan. 13th (p. 71) and Feb. 10th (p. 351), 1906, respectively.

[2] In some cases of central auditory aphasia the patient is "tone deaf" (there is "auditory amusia" as well as auditory aphasia), but auditory amusia is not necessarily present; it is not present in those cases in which the lesion is *confined to* the auditory *speech* centre; it is only present in those cases in which the lesion involves the part of the (lower) auditory centre concerned in the reception and registration of musical sounds. This is perhaps the middle part of the first temporo-sphenoidal convolution on *both* sides of the brain.

about to be asked to pick out one of the objects when it is *named*) he is unable to pick out the particular article when it is named. In the same way when *told* (verbally) to touch a given spot on his own body, say his ear, he is unable to do so. The condition is exactly that of a person who hears a foreign language which he does not understand, because an association has not been formed between the auditory speech symbols (words) and the ideas which those auditory speech symbols represent—i.e., between the cell groups in the auditory speech centre and the corresponding cell groups in the associated ("ideational") centres.

4. The patient is unable to repeat spoken language. This is usually the case but in some cases the patient can repeat words (spoken language) without understanding their meaning. In such circumstances this is no doubt effected either (*a*) through the lower auditory centre or (*b*) through the opposite (right) auditory speech centre.

5. The patient cannot write to dictation.

6. Internal speech is more or less profoundly affected. The patient cannot mentally recall and make use of auditory speech symbols since the cell groups in which they are stored are destroyed. Consequently, he cannot think in auditory speech symbols; and since, in most individuals at all events, thought is chiefly carried on by means of auditory speech symbols, the intellectual and reasoning faculties are, in those cases in which the word deafness is complete, profoundly affected. The degree of the intellectual defect no doubt varies in different individuals. In persons who are strong "visuals"—i.e., in persons in whom visual and speech symbols may be used as thought counters, so to speak—the intellectual defect will be much less marked than in persons who are strong "auditives"—i.e., in persons in whom the auditory speech symbols are chiefly used as thought counters. Similarly, one may theoretically suppose that in some persons who are strong "kinæsthetics"—i.e., in whom kinæsthetic speech symbols may be used (to some extent at least) as thought counters—the intellectual defect will be somewhat less marked than in persons who are strong "auditives."

In cases of central auditory aphasia compensation, so far as internal thought and speech are concerned, may in some persons at least no doubt be effected to some extent in both of these ways—i.e., by the substitution of visual and (perhaps in some cases and to a limited extent) kinæsthetic speech symbols for auditory speech symbols for the purpose of internal speech and thought; but in many, probably in most, cases of word deafness due to destruction of the left auditory speech centre compensation and restoration of the functional defect are probably effected by the *right* auditory speech centre taking up and carrying on the function of the left auditory speech centre which is destroyed.

7. Objects presented to the sensorium through the other senses, such as the eye, do not raise up in the mind the auditory speech symbols which correspond to them. The patient, for example, who is suffering from word deafness is shown a knife; he knows quite well what the object is, he knows its uses, but he cannot *name* the object; the cell group in the auditory speech centre in which the memory picture of the auditory speech symbol "knife" was stored has been destroyed; the overflow from the cell group in the visual centre corresponding to the object "knife" can no longer act upon (stimulate) the associated cell group in the auditory speech centre which represents the word "knife." If the destructive lesion in the auditory speech centre merely destroys the cell group in which the word-percept "knife" is stored the patient may still be able to make use of some synonym for knife. He might, for example, term a knife a "cutter," or "a something with which one cuts." In cases of incomplete word deafness these roundabout (*paraphasic*) expressions frequently occur. Possibly in some cases in which the left auditory speech centre is entirely destroyed the memory pictures of such roundabout expressions (more especially if they do not contain names) are so firmly imprinted in the right auditory speech centre, or even, perhaps, in the vocal kinæsthetic speech centre, that they can be revived and made use of for the purposes of speech and thought.

8. There are also, in many cases at least, marked defects in spontaneous vocal (motor or emissive) speech; for, as I have already stated, the action of the vocal speech centre is, in most normal individuals, stimulated from, and controlled and governed by, the auditory speech centre.

The alterations in spontaneous (emissive or motor) speech which result from destruction of the auditory speech centre vary very greatly in different cases both as regards their nature and severity. In some cases there is, for a time, complete motor aphasia; in others, there is marked paraphasia; in others, again, there is little or no defect in the action of the emissive (motor vocal) speech centre; and between these extremes there are all degrees of difference. These differences are no doubt due to a variety of causes, amongst which the following are the most important: (1) the completeness of the destruction of the auditory speech centre; (2) the fact whether the right auditory speech centre is capable of taking up and carrying on the function of the left auditory speech centre (which in most right-handed individuals is the "active" or "driving" speech centre); and (3) the relative degree of activity of the kinæsthetic speech centre in the individual patient whose auditory speech centre is destroyed—in most normal individuals the action of the vocal speech centre appears to be stimulated and governed by the auditory speech centre, but it is probable that the kinæsthetic memories of speech movements (which are, perhaps, stored up in Broca's convolution) may in some individuals be sufficiently active to enable the function of the motor-vocal speech centre to be carried on after the auditory speech centre is destroyed. I will return to this point, which is one of great difficulty, when I come to consider motor aphasia and the symptoms which result from destruction of Broca's convolution. There are usually also some defects—

9. In reading—i.e., in the understanding of written speech.

10. In (1) reading aloud; and in (2) spontaneous writing. The nature of these defects varies in different cases and seems to depend upon a variety of circumstances, amongst which the following are probably the most important. 1. Whether the lesion (which has destroyed the auditory speech centre) also involves the visual speech centre which is situated in close juxtaposition to the auditory speech centre. 2. The degree of completeness of the destruction of the auditory speech centre. 3. Whether the visual speech centre in the individual patient (whose auditory speech centre has been destroyed) is in direct communication with the "ideational" centres (this point has already been considered). As I have previously pointed out, the different speech centres are closely linked together and are in the habit of acting together (either in an obvious or a latent—unobvious—way); consequently a lesion in one speech centre is (in many persons, at least) likely to produce some form of functional derangement in the others.

A case illustrating the intimate connexion of the different speech centres.—A very striking illustration of the intimate way in which the different speech centres are connected came recently under my notice. I was seated in the waiting-room of a small wayside station waiting for a train; an intelligent man of about 40 was seated reading the newspaper between me and the window so that I had a sharp view of his profile; as he read he silently articulated everything that he read; his lip movements were most distinct. In other words, in this person the act of silent reading was associated with an obvious but silent discharge of the motor-vocal speech centre.

Symptoms characteristic of subcentral (subcortical or subpictorial) auditory aphasia or word deafness.—This is a very rare form of word deafness; the clinical features of this form of word deafness (which are diagrammatically represented in Fig. 19) are as follows.

1. The patient hears ordinary sounds and (?) can interpret their meaning. It must, however, be noted that in some cases ordinary hearing is in some degree, and it may be in a marked degree, impaired. This is due to the fact that the lesion may involve, as it did in Déjerine's case, *both* lower auditory centres. In cases of subcentral word deafness the destruction of *both* lower auditory centres is never complete, for complete destruction of both lower auditory centres would necessarily produce total deafness.

2. The patient is not necessarily tone deaf, though this is usually the case. I would expect tone deafness to be more frequently present in cases of subcentral than in cases of central auditory aphasia, for in the central form of auditory aphasia the lesion is usually limited to the left side of the brain and in order to produce complete tone deafness a *bilateral* lesion involving the tone centre (which is, perhaps, situated in the middle part of the upper temporo-sphenoidal convolution) on *both* sides of the brain is, I expect, necessary.

3. The patient hears words as ordinary sounds but does not understand their meaning; he is word deaf. He cannot pick out a knife from a number of objects when told to do so

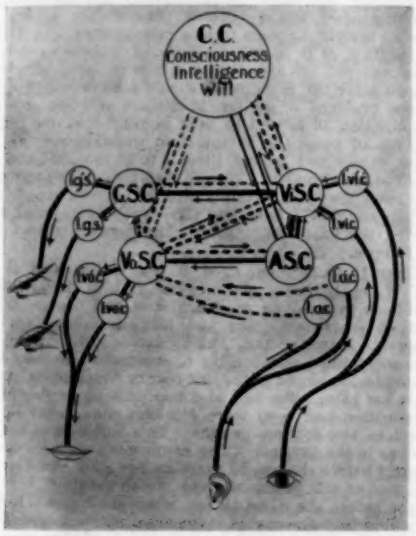
—i.e., he cannot identify an object when it is *named* to him.

4. The patient cannot repeat spoken language. (See *infra*, and Lecture II., p. 353, heading 2.)

5. The patient cannot write to dictation. In all other respects the speech faculties and mental faculties are unimpaired. The auditory speech centre is simply cut off, as it were, from the special ingoing or afferent (auditory) impressions by which it is in the habit of being stimulated; it is merely isolated from *its* periphery (the ear) and from impressions which reach it from *that* periphery. Its internal activity and its spontaneous or its emissive activity, as it may be termed, as a cerebral speech centre and mechanism are unaffected (or comparatively little affected).[3] Consequently—

6. Internal speech is not interfered with; the patient can think *in words* (auditory speech symbols); thought, intellect, and reasoning are not interfered with—at all events are not *directly* interfered with by the lesion in the auditory speech mechanism. Of course if the lesion should happen to be acute or very extensive the general disturbance of the cerebral functions which such a lesion is likely to produce may to some extent affect the intellectual and reasoning processes and it must be remembered that the lesion which is

FIG. 19.



Diagrammatic representation of the subcentral form of auditory aphasia. The connexions between the lower auditory centres (l.a.c. and l.s.c.) are interrupted. The auditory speech centre is intact. Auditory speech symbols (spoken words), which enter by the ear, do not reach the auditory speech centre and therefore cannot be understood; but auditory speech symbols can still be made use of for the purpose of thought and internal speech. The lesion is outside the "zone of language," there is therefore no derangement of the action of the vocal, visual, or graphic speech centres. The patient cannot write to dictation (unless, which is conceivable, spoken words can reach the visual speech centre—or possibly in rare cases the graphic speech centre—from the lower auditory centres). The patient cannot repeat spoken words unless (which is, I think, likely in some cases) there is a direct connexion between the lower auditory centres (l.a.c. and l.s.c.) and the vocal speech centre (Vo.S.C.).

the cause of *subcentral* auditory aphasia is usually (though perhaps not always necessarily) bilateral and often very extensive.

7. Objects presented to the other senses at once raise up in the mind the corresponding auditory speech symbols (the names of those objects). When the patient is shown a knife, for example, he can at once name it, for the overflow from the visual centre reaches the auditory speech centre and calls up the appropriate auditory speech symbol which is stored in it.

8. There are (provided that the lesion is strictly limited to the auditory nerve apparatus below, i.e., on the afferent side of, the auditory speech centre) (1) no defects in spontaneous vocal (motor or emissive speech); (2) no defects in reading (i.e., in understanding written speech); (3) no defects in reading aloud; and (4) no defects in spontaneous writing.

From the above description it will be seen that the subcentral and central forms of aphasia have these features in common—viz., that the patient is word deaf, is unable to repeat spoken words and to write to dictation. As I have previously stated, in some cases of *central* auditory aphasia the patient *does* seem to be able to repeat spoken words but without understanding their meaning. But subcentral auditory aphasia differs from central auditory aphasia in the facts: (1) that in it (subcentral auditory aphasia) internal speech and thought are unaffected and that there is no derangement of the action of the vocal, visual, or graphic speech centres, while in the central form of auditory aphasia internal speech and thought are more or less profoundly affected and the action of the vocal, visual, and graphic speech centres is (usually) deranged in a marked degree; and (2) that in subcentral auditory aphasia ordinary hearing is usually impaired in some and often in a marked degree and there is usually some tone deafness (auditory amusia); while in the central form of auditory aphasia this is not (usually, or, so far as we know, so frequently) the case.

It is hardly necessary to say that the distinction between the subcentral and central forms of auditory aphasia is rarely met with in practice; for, *in the first place*, subcentral auditory aphasia is (for the reasons which will be subsequently given) very rare, and, *in the second place*, the lesion on the left side of the brain which involves the left lower auditory centre usually also involves, to some extent at least, the higher auditory speech centre.

So far as I know, there are very few well-authenticated cases of subcentral word deafness on record in which the diagnosis was verified by post-mortem examination. The most valuable with which I am acquainted is that described by Déjerine and Sérieux. The leading details of that case are as follows:—

A case of subcentral word deafness with necropsy (Déjerine and Sérieux).[4]—The patient, a woman, aged 46 years, came under observation in the year 1887. For several years prior to the onset of the aphasic symptoms she had, as the result of an old otitis, been totally deaf in the right ear. The symptoms were typical and characteristic of subcentral word deafness. The patient could hear ordinary sounds, she was unable to understand spoken language, she was unable to repeat spoken words, and she was unable to write to dictation. Spontaneous vocal speech was unaffected; she could read (i.e., understand written speech characters); she could read aloud; she could write spontaneously; she was able to copy written speech intelligently; the mental faculties were unaffected. She remained in this condition for five years—from 1887 to the end of 1892. In 1892 additional symptoms indicative of what the authors term "sensorial aphasia" (combined word deafness and word blindness) developed—symptoms which showed that the word deafness was no longer the result merely of a lesion in the parts below (on the afferent side of) the auditory speech centre, but that the auditory speech centre itself and (?) the visual speech centre were involved. These symptoms were paraphasia and paragraphia, at first slight, gradually becoming more marked, with affection of internal speech. Soon the symptoms of sensorial aphasia became aggravated and jargon aphasia developed; the patient lost the power of comprehending written language; her writing became incomprehensible, her signature even was altered, and her intelligence gradually became affected. As the case progressed the acuity of hearing in the left ear (the only ear with which she could hear in consequence of the old otitis in the right ear) gradually became impaired; ultimately she became markedly deaf in the left (hearing) ear. The patient died in March, 1895, at the age of 55 years, eight years after the commencement of the aphasia.

The post-mortem appearances were as follows. *Both* temporal lobes were atrophied; they were reduced to half their normal size; the atrophy was symmetrical; the atrophied convolutions preserved their form. In consequence of this atrophy the island of Reil on each side was uncovered and exposed. The atrophy of the convolutions was most marked *above*; it diminished from above downwards, the first temporal convolution being much more atrophied than the second, and the second more atrophied than the third. The atrophy was also most marked in *front*; it diminished from before backwards and gradually became less as it reached the supramarginal convolution and the attachment of the angular gyrus to the upper temporo-sphenoidal convolution. The angular gyrus itself was unaffected. In the affected areas the cerebral cortex was sclerosed and the pia mater slightly adherent. All other parts of the hemisphere were absolutely normal; the cerebellum was normal.

Histological examination.—After hardening in Müller's fluid, 800 to 900 sections of the whole hemisphere were made by Gudden's microtome; these sections, after being stained in various ways, were submitted to microscopic examination. The lesion of the convolutions was essentially a cellular lesion—a chronic polio-encephalitis—which had increased from the periphery towards the deeper parts of the cortex. The small nerve cells in the superficial parts of the cortex

[3] The fact that it is cut off from its usual source of stimulation will no doubt have some effect on its internal and spontaneous activity.

[4] Comptes Rendus des Séances de la Société de Biologie, Dec. 18th, 1897.

had completely disappeared; the large pyramidal cells in the deeper parts of the cortex were less affected but were less numerous than normal. The cells of the neuroglia were more numerous than normal, the vessels were thickened, the pia mater was thickened. The radiating fibres and the short associating fibres passing between adjacent convolutions were much less numerous than normal. There was no coarse lesion, no softening either of the grey matter or of the subjacent white tissue, but the projection fibres of the temporal lobes were notably diminished in number. The external fasciculus of the cerebral peduncle—the fasciculus of Türck—contained fewer fibres than normal.

This case is one of very great importance. It shows, as Déjerine and Sérieux point out (1) that subcentral (subcortical or subpictorial) word deafness may be due to *a purely cortical lesion* (hence, as pointed out in the first lecture, the terms "central," "subcentral," and "supracentral" are, I think, better terms than the terms "cortical," "subcortical," and "supracortical"); and (2) that subcentral word deafness is the result (in some cases at least and probably in most cases) of a *bilateral* lesion which involves, but does not completely destroy, *both* lower auditory centres.[5] The lesion was more marked and more advanced in the anterior than in the posterior part of the first temporo-sphenoidal convolution; and in the earlier stages of the case the word deafness merely presented the characteristics of subcentral word deafness, whereas in the later stages of the case (i.e., when the lesion extended farther back) the symptoms were indicative of central word deafness. The lesion of the lower auditory speech centres must at first have been incomplete, for the patient could hear sounds with the only ear (the left ear) which was available; in the earlier stages of the case she was not deaf but merely word-deaf. If the destruction of both lower auditory centres had at its commencement been complete it would have produced, not merely word deafness, but total deafness.

I may remark in passing that the case has an important bearing on subcortical word blindness; it suggests that subcentral (subcortical) word blindness may, perhaps, in some cases, be due to a cortical lesion which involves, but which does not completely destroy, both half-vision centres. I will return to this point when I come to speak of visual aphasia.

(To be concluded.)

ON THE OCCURRENCE OF METRORRHAGIA AFTER THE MENOPAUSE IN CASES OF OVARIAN TUMOUR.

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THE recurrence of bleeding from the vagina after the menopause has been definitely established is, in the large majority of cases, as is well known, an indication of the presence of a malignant growth in some part of the genital tract—in the external genitals, in the vagina, or in the cervix or body of the uterus. To give it this unfavourable significance in its fullest extent, however, it is necessary that no doubt should exist that the menopause has actually occurred. This raises the question as to what length of interval without the occurrence of any red vaginal discharge is to be accepted as indicating the establishment of the change of life. I think for practical purposes an interval of two complete years without any sign of menstruation may be accepted as conclusive proof that the menopause has occurred. Any future bleeding after such an interval is to be regarded not as a return of menstruation but as a symptom of the existence of some pathological condition in almost all cases. I say "almost all cases" because, very rarely, some two or three times in the past 20 years, for instance, I have met with a case where bleeding has occurred after the definite establishment of the menopause, in which no evidence of any morbid condition could be found either at the time when the case was first seen or at any subsequent time while the patient continued under observation. Such cases are, however, so exceedingly rare that no appreciable consideration need be given to them in ordinary clinical work. In most cases bleeding after the menopause means the presence of a malignant growth. In a small minority of cases, however, such bleeding is due to some morbid condition quite independent of malignant disease. To mention a few of them, it may be due to some fresh changes taking place in a uterine fibroid that has been perhaps altogether quiescent for several years; it may be due to a mucous polypus, or even to a subacute senile vaginitis, though in both these cases the predominating colour of the discharge is generally yellow with only a moderate, or occasional, admixture of blood in it. It may also be due to a senile endometritis, though here also a free discharge of fresh red blood is not at all common, at all events to anything like the amount that is the rule in cases of cancer. Once again, bleeding after the menopause to a slight extent may be merely due to the ulcers formed on the prolapsed parts in cases of prolapse of the uterus and vagina. The last instance to be mentioned is the one that is illustrated by the three cases recorded in this paper. The growth of an ovarian tumour in patients past the menopause in rare instances causes a discharge of blood from the uterus. Some nine years ago I recorded a case of this kind in THE LANCET.[1] In that case the bleeding ceased after ovariotomy had been performed and did not recur. This bleeding after the menopause, due to the growth of an ovarian tumour, appears to be a rare occurrence and there is no mention of it in the majority of text-books to which I have referred. While therefore the presence of a red discharge after the menopause should always raise a suspicion of the presence of malignant disease and lead to a careful examination, it is well to bear in mind that in a small percentage of cases the symptom in question may be due to other causes and among these is to be included the growth of an ovarian tumour. Though instances of this appear to be rare, and they are certainly rare in my own experience, yet it happens that I have had three such cases under my care during the past nine months. The notes of these cases are as follows.

CASE 1.—A woman, aged 60 years, was sent to me by Mr. W. W. Baxter of Manningtree, on Oct. 12th, 1905. She had been married 39 years and had had five children—the last 15 years ago. She had had one miscarriage in the interval between the third and fourth confinements. She complained of a feeling of discomfort in the abdomen, which had enlarged in the last four or five months. Stooping gave her pain. She had also had pain on passing urine and micturition had been more frequent than usual during the previous two or three months. This had been so at night as well as in the daytime. The menopause occurred some time shortly before she was 50 years of age and from that time—a period of ten years—she had "seen nothing" until a fortnight before she came to me, when she began to have some bleeding from the vagina. On examination a cystic swelling was felt occupying the lower two-thirds of the abdomen. It had some degree of mobility. On vaginal examination there was some recent blood about the parts. The cervix was healthy. The uterus was moveable and seemed separate from the tumour. Soon afterwards she came into a nursing home and I performed ovariotomy on Oct. 26th, 1905. The tumour was a multilocular ovarian cyst of the right ovary. The left ovary was normal. She made an uneventful recovery and went home about a month from the date of the operation. A curious feature subsequent to the operation was the occurrence of an erythema over the abdomen, spreading to the legs and the back, which persisted for about the first ten days after the operation without any rise of temperature.

CASE 2.—A married woman, aged 58 years, was admitted under my care into the London Hospital on Oct. 25th, 1905. She had been married 28 years and had had nine children, the last 11 years previously. She had had no miscarriages. The catamenia appeared when she was between 11 and 12 years old, and she had always been regular every four weeks. The periods generally lasted four or five days. The loss was scanty and had been unattended with pain. The last regular period had occurred seven years previously to her admission—that is to say, when she was 51 years old—after which there was no red discharge of any kind for four years. Then she noticed a red, or sometimes coffee-coloured, vaginal discharge. With regard to the present illness, she had been conscious of a lump in the abdomen for two years and, as

[5] Whether subcentral word deafness is always the result of a bilateral lesion remains to be proved by future observation.

[1] THE LANCET, Jan. 2nd, 1897, p. 23.

mentioned above, she had had a vaginal discharge, which had been sometimes coffee-coloured and at other times bright red, since she was 55 years of age. On admission a somewhat hard swelling was felt occupying the lower abdomen and rising a hand's breadth above the pubes. On vaginal examination there was seen some prolapse of both vaginal walls. The tumour noticed in the lower abdomen could be felt bimanually in the anterior fornix. It felt hard and like a partially calcified fibroid. The sound passed 2¾ inches and on moving it slightly it seemed clear that the uterus was separate from the abdominal tumour described. The uterus seemed quite normal.

Operation was performed on Oct. 31st. Abdominal section was done in the usual way and the tumour was found to be a fibroid of the left ovary. On section it showed some yellowish patches of degeneration and there were also one or two small cysts seen. The cysts were adjacent to the surface. There were several small patches of calcareous deposit on the surface of the tumour. The tumour had grown from the outer extremity of the ovary and the inner part of the ovary, about half of it, was apparently unaltered. The right ovary was healthy. There was no free fluid in the peritoneal cavity. The patient made an uninterrupted recovery and left the hospital on Nov. 25th.

CASE 3.—A married woman, aged 74 years, was admitted into the London Hospital under my care on March 7th, 1906. She had been married 52 years and had had ten children, the last 30 years ago, and two miscarriages, the last 34 years ago. The catamenia appeared when she was 15 years of age and had always been normal. The menopause occurred at the age of 48 years. Her complaint was that for the three months prior to her admission to the hospital she had had a constant blood-stained discharge from the vagina. From the age of 48 years till three months ago she had had no red or other vaginal discharge at all. She said that she had been getting thinner lately but that her "stomach" had been growing larger. She had lately had to pass urine much more frequently than usual, both during the day and at night. On examination of the abdomen an elastic swelling was felt occupying chiefly the left side of the abdomen; its highest point was two fingers' breadth from the costal margin. On the right side the outline of the tumour corresponded to a line drawn from the umbilicus to the right anterior superior iliac spine. On vaginal examination the vaginal portion of the cervix was normal; a slight brownish-red discharge was seen in the os. The sound passed through the external os with a slight jerk and could only be passed to the extent of about an inch. Doing this caused no fresh bleeding. A probe a good deal thinner than the uterine sound was then tried and found to pass 2½ inches. No fresh bleeding was caused by manipulating the probe in the body of the uterus.

Operation was performed on March 9th. Ovariotomy was done and the tumour was found to be a multilocular cyst of the left ovary. The right ovary was much atrophied. Except for a little bronchitis after the operation the patient made an uninterrupted recovery. It is interesting to notice that in this case it was the presence of a red vaginal discharge which attracted the patient's attention and caused her to seek advice.

Harley-street, W.

ON THE VACUOLATED MONONUCLEAR CELLS IN THE BLOOD OF THE GUINEA-PIG.

[PRELIMINARY COMMUNICATION.]

BY J. C. G. LEDINGHAM, M.B., B.SC., M.A. ABERD.

(From the Bacteriological Department of the London Hospital and the Lister Institute.)

WHILE investigating the question of leucocytosis in the guinea-pig my attention was directed to the presence in stained films of a peculiar form of mononuclear leucocyte. This leucocyte, while possessing generally the characters of the large mononuclear variety of human hæmatology, had a highly vacuolated cytoplasm and lying in the vacuole, which was in the majority of cases single and of large size, was seen a round, oval, and somewhat irregular mass of finely granular material staining a dull-red with Leishman's stain. In the literature one finds but few references to the leucocytes of the guinea-pig. Hirschfeld, in 1897, discussed, in Virchow's *Archiv* the comparative morphology of the white cells of many of the domestic animals, including the guinea-pig, but made no mention of the vacuolated cells. In 1898 Kurloff's work on the part played by the spleen in blood formation and the blood changes after splenectomy appeared in Ehrlich's "Die Anæmie." The guinea-pig was the animal employed and in the course of his description of that animal's leucocytes he makes the following brief reference to the vacuolated cells:—

> We find here a peculiar cell group that is characteristic for guinea-pig's blood. These cells possess no granulation but in its place we find in the protoplasm a rounded nucleus-like structure which is stained by nuclear dyes and is possibly to be placed in the category of a *Nebenkern* or accessory nucleus. Our impression was that we had to do with a vacuole filled with a secretion product of the cell. Examination of a large series of preparations permits us to form some conclusions regarding the development and fate of these structures. At first they appear in the protoplasm as discrete granular dots having no relationship with the cell nucleus. These gradually increase in size and attain considerable dimensions. When they have become as large as the cell nucleus itself they appear to break through the enveloping cell protoplasm and to quit the cell.

As I was anxious to ascertain whether anything further was known regarding these cells Dr. W. Bulloch kindly wrote on my behalf to Professor Ehrlich who replied that he had not directed his attention for many years to these peculiar structures but that he still thought they represented some "*Secretstoff*." He also kindly forwarded a dissertation by Hans Bab on Colostrum Formation which appeared in 1904 and contained some references to the vacuolated cells of the guinea-pig. This author found in film preparations of the marrow and spleen vacuolated cells containing masses of ill-defined granules staining metachromatically with thionin. These cells he preferred to consider as new discoveries on his part but they are undoubtedly identical with those described by Kurloff in the circulating blood. He agreed with Ehrlich that the body represented a mass of granular *Secretstoff*.

In the *Journal of Medical Research* for 1904 Burnett gives a description of the leucocytes of normal guinea-pigs and makes some references to the vacuolated cells. He states that in fresh blood these bodies are round, homogeneous, and straw-coloured, varying in size from one micron or less to a body occupying nearly half of the cell.

Some types of vacuolated cells as seen in films.
N, Nucleus. B, Body. L.V., Large vacuole. S.V., Small vacuole.

Occasionally true lymphocytes and polynuclear cells were seen with these bodies inside them. In some cases the body presented a clear oval central part, while the peripheral area contained many fine purplish granules (Wright's stain) which seemed to be nodal points of a fine purplish reticulum.

These are all the facts relating to these peculiar structures which I have been able to find in the literature. During the last nine months I have examined numerous films mostly from adult guinea-pigs or, at any rate, from guinea-pigs three months old and upwards. Leishman's and Giemsa's stains were invariably employed. In the majority of the animals the description of the minute structure of the body given by Kurloff and Burnett holds good. The vacuole was either completely filled with fine granular material or presented an irregular homogeneous central mass with granular radiations extending to the periphery. In some animals, however, a totally different appearance was presented by the body inside the vacuole. With Giemsa's stain after fixation by methyl alcohol the body was found to consist of distinct purplish-staining rods. These latter

when very numerous had the appearance of a reticular skein with denser portions here and there; in fact, it had exactly the felted honeycomb appearance of a streptothrix preparation. The skein-like character was exceedingly remarkable and gave the impression of being due to the windings of one continuous thread. It is more probable, however, that the meshwork is due to the close apposition of rods lying inclined at all angles to each other, for in some cells the vacuole was filled with perfectly discrete small thick rods. I have never seen these bodies inclosed in other than large mononuclear cells. Regarding Burnett's statement that he had noted the bodies very rarely in polynuclear cells, I should certainly think that he had mistaken a detached portion of the nucleus for one of these bodies. Such detached nuclear portions are exceedingly frequent in the polynuclear cells which exhibit marked winding of the nuclear chromatin. Kurloff's statement that the body may ultimately break through the enveloping protoplasm and leave the cell I have been unable to verify. It is quite true that in the preparation of the films a body may become dislocated from the cell protoplasm but I have never found an apparently free body far away from a large mononuclear cell. I should therefore think that the body, whatever be its nature, develops and disintegrates *in loco*. Evidence of such disintegration is frequently seen in the faint staining power or even complete disappearance of the contained granular matter. The number of these vacuolated cells varies in different animals. On an average they form about 8 per cent. of the total leucocytes with a variation of from 4 per cent. to 11 per cent.

As regards the age at which these vacuolated cells appear in the blood of guinea-pigs I have been impressed with the fact that in animals under three weeks old none of these peculiar cells are to be seen in stained films. In one case a female guinea-pig was killed during pregnancy. Blood from the placenta showed numerous vacuolated cells but in the heart blood of the fœtus I was unable to find any. Neither did I find any in films prepared from the fœtal spleen and marrow, though they were very numerous in films from the maternal organs. In other cases the blood of young guinea-pigs has been examined from birth onwards, but, as a rule, definite vacuolated cells like those of the adult do not appear till about the third week.

An interesting question is the distribution of these cells in the organs. In splenic films they are frequently very numerous, far more so than in the marrow. There is no difficulty in distinguishing them from the blood-corpuscle-containing cells (*Blutkörperchenhaltige Zellen*) which may occur in large numbers in the spleen pulp. On examining the fresh, unstained spleen pulp on the warm stage one can readily recognise these cells by the large straw-coloured homogeneous vacuole filling sometimes three-fourths of the cell body, the nucleus being pushed to the side. Also, in fresh blood the same appearance is observed. No trace of the body inside the vacuole is seen in the fresh unstained condition but by adding neutral red to the blood on the warm stage it is found that the only substance which takes up the stain immediately is the body inside the vacuole. It may appear as reddish granules in active Brownian movement or as distinct rods or even round and irregular clumps. In sections of the spleen stained by Giemsa these cells form a very striking picture. The vacuole is stained a pale pink and appears quite homogeneous. Probably the procedure employed in the fixation of the tissue has caused a dissolution of the granular matter. In one spleen which I examined these cells were present in enormous numbers in the pulp but were quite absent in the Malpighian follicles. Curiously enough, in other spleens it is difficult to demonstrate any in sections.

The question now arises, What is the significance of these bodies? If they represent some *Secretstoff*, as Ehrlich thought, one might expect to find them in the blood of other members of the Caviidæ. To settle this question I have had an opportunity of examining the blood of four allied animals, agoutis and cavies. These were Dasyproctida cristata, Dasyproctida prymnolopha, Dasyproctida punctata, and Cœlogenys paca. In none of these animals did I find anything approaching the structures found in guinea-pig's blood, although the leucocytic formulæ of these animals resembled closely that of the guinea-pig. The peculiar structure of the body suggested the idea of its being a parasite or leucocytozoon of some sort. In favour of this view is the fact that these bodies are not found in young animals or in allied species and that they occur in such varying numbers in different animals.

When fresh blood in normal salt solution is carefully watched on the warm stage the vacuole is so highly refractile that the included body is invisible. It immediately comes into view, however, on adding a trace of neutral-red solution, while the nuclei of the leucocytes and the granules of the polymorphonuclear cells take up the stain much more slowly. There is no evidence that the body makes its exit from the vacuole or that definite free motile forms appear, although the amœboid character and the peculiar spermatozoid-like form of the blood-platelets are undoubtedly apt to lead to some confusion owing to their close resemblance to flagellated parasites. On the other hand, in the absence of any definite proof of parasitic origin, the morphological structure of these bodies in stained films and their inclusion in vacuoles of the cytoplasm suggest a marked analogy to the so-called parasitic vaccine bodies or cell inclusions first described by Guarnieri (cytoryctes variolæ or vaccinæ) and since confirmed by numerous observers in lesions of the cornea, epidermis, &c., in experimental variola and vaccinia. Further investigations of these bodies are in progress.

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A CASE OF COMPLETE REMOVAL OF A MULTILOCULAR CYSTIC TUMOUR OF THE PANCREAS;

COLO-COLIC ANASTOMOSIS 16 DAYS LATER; RECOVERY.[1]

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THE case here recorded is the second in which I have been so fortunate as to be able to remove completely a multilocular cystic tumour of the pancreas. The patient, a female, aged 50 years, felt something move in her abdomen and was very sick about six months before she sought medical advice. This disturbance soon passed off and she "forgot" about the "lump" but she began to lose flesh and strength about that time. A month before I saw her she fainted and was very pale for the following week. The fæces were "like ink" for three days and then resumed their natural colour. Apparently there had been a hæmorrhage into the upper part of the alimentary tract. The patient again became conscious of something abnormal in her abdomen and consulted Dr. Basil G. Morison who sent her to me. Her general condition was good, the urine was normal, and the bowels acted well without medicine. There was an oval, hard tumour in the left side of the upper abdomen measuring about four inches in its lateral diameter and rather more from above downwards. It had considerable mobility exactly resembling that of a large loose kidney, the greatest fixity being towards the spine. The percussion note over the most prominent parts was dull before and behind, the area of dulness varying with the position of the tumour. The right kidney was somewhat mobile. I diagnosed a malignant growth in a loose left kidney, the capsule of which had not yet ruptured.

At the Samaritan Free Hospital, on April 26th, 1905, I opened the abdominal cavity by an incision outside the left rectus muscle. The transverse colon was displaced downwards and pressed forwards by a growth which was seen between it and the stomach. There was only one layer of serous membrane over the tumour which apparently had developed to the left of the lesser sac of the peritoneum. The kidney was in normal position behind the neoplasm and the tail of the pancreas lay across the upper inch or rather more of its anterior surface intimately attached to it. Many vessels over the tumour were ligatured as they were divided and the mass was gradually freed without much loss of blood until its only attachment was to the pancreas. I cut into this gland so as to get the whole growth away. The pancreatic tissue bled freely but it showed no friability and ligatures applied to it held well. A large vein, quite a third of an inch in diameter, was cut across and there was a

[1] A paper read before the Clinical Society of London on May 11th, 1906.

profuse hæmorrhage for a moment but both ends were secured in forceps and safely tied. When the pancreas was released it immediately turned round so that its anterior aspect presented unharmed. Evidently the new growth had arisen from the posterior surface of the gland and rather from the upper part of it. The fact that the pancreas had been incised gave rise to no subsequent trouble. In enucleating the tumour both layers of the transverse mesocolon were divided and the edges of the inferior layer were brought together by sutures. A drainage-tube was inserted through an incision below the twelfth rib, the anterior abdominal wound was closed, and healing gave no trouble.

From the first there was considerable distress caused by vomiting and retention of flatus. The bowels acted when enemata were given but every attempt to give the patient a sufficient quantity of food was followed by symptoms of a partial obstruction of the bowel and there was an increasing tendency to intestinal distension. A great deal of peristaltic movement became visible in the epigastric and umbilical regions and down almost to the pubes. I thought that the small intestine was adherent somewhere, probably to the wound of the transverse mesocolon, and as the patient was losing ground the abdomen was reopened on the sixteenth day after the operation. It was then obvious that the large intestine was at fault and that the difficulty was caused by an unusually acute angle at the splenic flexure, the mobility of the transverse colon being interfered with by adhesions between it and the anterior abdominal wall. The ascending and transverse colons were elongated, distended, and tortuous, so as to fill the area where peristalsis had been visible. The adhesions were released, a lateral anastomosis was made between the transverse and descending colons, and flatus escaped freely from the rectum a few hours after the operation. There was for a time a tendency for fæces to collect in the colon but there were no further urgent symptoms and the patient, who had become very emaciated, gradually put on flesh and left the hospital on July 3rd. I saw her again on March 13th, 1906, when her general health was good and the bowels were acting regularly without medicine. She complained of a dragging pain in the right side and the right kidney was much more mobile than it had been. A belt and pad have given relief.

The tumour was a multilocular cystoma measuring about four inches by about three and a half inches, with a small amount of solid tissue here and there between the cysts. It is preserved in the museum of the Royal College of Surgeons of England and Mr. S. G. Shattock has kindly informed me that two solid pieces which he examined "differed somewhat in structure. In one the substance was fibrous, containing glandular spaces in process of cystic distension. Some of the proper glandular tissue suggested that of the pancreas. In places, however, it was quite atypical, the cells, which were of large size (and not compressed from cirrhosis), being devoid of any true glandular order and disposed in solid groups after the manner of a carcinomatous lesion. This indication was confirmed in the sections of the second piece of solid tissue, a triangular area about three-quarters of an inch along each of its sides. The structure shown here was of large polyhedral cells, some of striking size, and with more than a single nucleus." The cysts were lined with an epithelium of columnar cells. Unfortunately, the tumour was kept in spirit for some time and the characters of its fluid contents were not determined.

[Notes of the other case[2] in which a similar tumour was removed by me were here given and two cases published by Dr. W. Watkins-Pitchford[3] and Mr. H. H. Clutton[4] were referred to; also one recorded by Dr. Reginald H. Fitz[5] and eight cases collected by him—all those of "benign multilocular cysts of pancreatic origin" which he could find. A case related by Dr. L. H. Dunning[6] resembled the one now recorded in many details.]

These tumours are rare, my two specimens and that described by Dr. Watkins-Pitchford, being the only examples in the museum of the Royal College of Surgeons of England. Moreover, in some of the cases collected by Dr. Fitz the abnormal condition appears to have arisen from dilatations of the pancreatic ducts and not as a new growth. It has been suggested that some tumours, closely resembling those described and found in the neighbourhood of the pancreas, do not arise from that gland but from remnants of the Wolffian body. Professor Monprofit[7] has published a case in which a large cystic tumour was so firmly attached to the spleen and to the tail of the pancreas that it was necessary to remove both to complete the operation, from which the patient made a good recovery. The microscopic and other characters of the neoplasm constituted the chief grounds for believing that the tumour did not originate in the pancreas. On the same grounds, in my two cases the tumours would be definitely attributed to this gland as their site of development. The first contained strongly amylolytic fluid and was certainly not a retention cyst, whilst the microscopical characters of the second were suggestive of the proper structure of the pancreas. There can be no doubt, therefore, that cases do occur in which the connexions and structure and contents of the tumours clearly indicate that they are of pancreatic origin.

The diagnosis of these removeable multilocular cysts of the pancreas is very difficult. The fact of their being removeable involves the presence of sufficient pancreatic tissue to prevent symptoms arising from destruction of the gland. In both my cases, and in others to which I have referred, the tumours were mistaken for renal growths and this error may be hardly avoidable. When the neoplasm has been more median in position it has frequently been mistaken for an ovarian cystoma and I think that Dr. Fitz's case is the only one that was diagnosed as pancreatic before being operated upon.

When it is possible these tumours should be removed. Although the operations were not easy there were no important manipulative difficulties in my cases and drainage of a multilocular cyst cannot be really curative. Moreover, in several cases, including the first above recorded, the microscopic appearances of the growth were those of a carcinoma, for which nothing but complete removal can be of any use. The subsequent history of such cases is of much interest and I therefore hope to be able to record my patients' condition on some future date.

Portman-street, W.

[2] Transactions of the Medical Society of London, vol. xxi., p. 97.
[3] Transactions of the Pathological Society of London, vol. liv., p. 354.
[4] St. Thomas's Hospital Reports, vol. xxi.
[5] The American Journal of the Medical Sciences, New Series, vol. 120, p. 184.
[6] The American Journal of Obstetrics, 1905, p. 101.
[7] Ablation d'un Kyste du Corp Wolff avec Pancréatectomie Partiale et Spléenectomie, par M. le Pr. Monprofit (d'Angers), Gazette Médicale de Paris, March 12th, 1904.

HERNIA OF THE VERMIFORM APPENDIX, PROBABLY INFANTILE, AND PERFORATED BY A PIN WHILE IN THE SCROTUM.

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IN THE LANCET of Feb. 3rd last, p. 297, I reported a case of hernia of the vermiform appendix in which both the history and the condition found on operation pointed to its having been the seat of abscess while in the scrotum. As illustrating another condition in which, as in the former, the position of the appendix in the scrotum rendered the prognosis much less grave than it would have been had the appendix occupied its normal position, the following case may prove of interest.

The patient, a man aged 62 years, was sent into the Glasgow University Surgical Clinic on Feb. 20th as a case of strangulated hernia. Sir William Macewen, whom I assisted at the operation, kindly permitted me to prepare this report. The patient, whose history of the condition is unsatisfactory, stated that 12 years previously to admission he had severely strained himself while lifting a sack and that a swelling then appeared in the right inguinal region. This swelling was small but so painful as to necessitate his taking to bed. Notwithstanding the rest in bed the swelling increased in size until a week after the onset it became large, red, and tender, after which however it gradually subsided. The patient was then fitted with a truss which he continued to wear until recently and which enabled him

to perform his work in comparative comfort. Two weeks prior to admission he began to suffer considerable discomfort which he at first attributed to the truss. The discomfort increased, notwithstanding rest in bed, and gave place at last to distinct pain. Three days prior to admission he took a dose of salts which acted very thoroughly and, as the pain continued to increase, he finally sought admission to the infirmary.

On examination the patient, who looked older than his real age and suffered from bronchitis and defective circulation, was found to have a large pyriform swelling affecting the right inguinal region and scrotum. The scrotal tissue was much inflamed. The testicle appeared to be fused with the mass which was fairly firm in consistence and dull to percussion. Fortunately for the patient, as will be appreciated when the condition found has been described, the swelling, although moveable, was not reducible. No impulse on coughing was elicited. The temperature on admission was 98·8° F. and the pulse was 68.

Operation having been decided on, an incision as for the radical cure of hernia was made and the mass was exposed. It was found to consist externally of a thick layer of matted, omental-like tissue, which was greatly congested and presented a dark purple, mottled appearance. This sac (as it was afterwards found to be) was much inflamed and was bound below by inflammatory adhesions to the testicle, which was also much inflamed. The sac having been

The appendix is seen to be thickened and inflamed, suspended vertically, its lower half inclosed in the inner, thick, fibrous sac which is laid open. On the left-hand side, half an inch above the lower curled extremity of the appendix, the pin is seen projecting for about half an inch through the wall of the appendix and engaging above in the wall of the sac. On the right-hand side the mesentery of the appendix, much thickened and loaded with fat, is well shown.

opened into was found to contain a second sac, composed of thick, dense, fibrous tissue, of globular shape, which when traced upwards toward the inguinal canal was seen to be continuous above with normal peritoneum. At the junction of thickened fibrous sac with normal peritoneum there was a slight constriction. This inner fibrous sac having been freed from inflammatory adhesions and thoroughly exposed was next incised and opened and was found to contain the considerably thickened and much inflamed vermiform appendix. Here, as in the case previously reported, the mesentery of the appendix was much hypertrophied and laden with fat. The appendix not coming readily out of the sac, and something hard, like a piece of wire, being felt inside, the sac was incised along its anterior surface to the base and opened up. It was now found that the appendix was held in position by a pin, the point and about half the shaft of which projected through a small ulcerated aperture in the wall of the appendix. The pin was directed upwards and engaged at the point in the thick fibrous sac, which was also slightly ulcerated at the point of penetration (*vide* illustration). The point of the pin having been disengaged from the sac, the appendix was freed from some slight adhesions and lifted out from the sac. Then, on applying slight traction the colon, which had occupied the upper portion of the sac composed of normal peritoneum, was brought into view. Appendectomy was now performed in the usual manner. As the colon and all the surrounding parts were markedly inflamed it was decided not to proceed with the radical operation for the cure of hernia. The bowel having been returned to the abdomen, the inner fibrous sac already referred to, which contained the appendix, was removed, after which the outer, thick, omental-like sac was ligatured, freed from the testicle, and likewise removed. The wound was then stitched up. The patient made an uninterrupted recovery.

Reference to the literature of the subject shows that hernia of the vermiform appendix is by no means rare, many cases being reported of right inguinal and femoral hernia containing the appendix and even some left-sided hernia. In a considerable number of cases the cæcum occupied the hernial sac, the presence of the appendix following as a matter of course, while in others the appendix, as in the above case, alone occupied the hernial sac. In such cases it is interesting to note that the appendix (with, probably, its fat-laden mesentery) is frequently compared to a supernumerary testicle when felt through the scrotum prior to operation. In the case previously reported by me the thickened mesentery gave exactly this feeling, while the appendix itself felt like a much thickened cord running up the inguinal canal. In the present case the amount of swelling was too great to permit of accurate palpation of the parts.

With regard to the variety of hernia which was present in this case, while the inflammation and consequent matting of the tissues make it impossible to be certain on the point, the presence of the double sac, one within the other, the outer being intimately attached to the testicle, would suggest that we had here an infantile form of the type to which the term "encysted" is generally applied. In quite a number of the cases reported suppuration has occurred while the appendix was in the scrotum, which fact is attributed by some to the stagnation of the contents of the appendix while so placed, thus lowering the vitality of its walls, and to interference with its circulation due to the position, possible tightness of the rings, and the use of a truss. Others are inclined to think that the presence of the appendix in the hernial sac is due to its having previously been affected by appendicitis and to its having contracted adhesions during the process.

Lockwood mentions that the gubernaculum testis is sometimes attached above to the cæcum and vermiform appendix and it might therefore be reasonable to suppose that in some cases of inguinal hernia of the appendix such an attachment of the gubernaculum would tend to produce such a result. In my former case there was evidence of the appendix having occupied the inguinal canal from a very early age, while its apex was firmly attached to the upper portion of the epididymis by an adhesion which certainly was of old standing. Developmental peculiarities may also account for some of the left-sided varieties of hernia of the appendix, the large intestine occupying the left side of the abdomen during a period of fœtal life.

So far as I can ascertain, only a comparatively small number of cases have occurred of perforation of the appendix while in the scrotum by a foreign body. Symonds reports[1] the case of a female, aged 18 years, who had a swelling of three years' standing which began to give trouble a week before admission to hospital. In this case the swelling resembled an inflamed gland but on operation was found to consist of the appendix perforated by a pin. A case is also reported by Roberts of Louisville of perforation of the appendix by a pin but I have been unable to obtain the details of the case. Hutchinson[2] mentions a case of perforation of the appendix while in the hernial sac by a hard spicule. Of course, foreign bodies, such as pins and needles, are not infrequently met with in the appendix in its normal position and they are frequently, as in a case I saw operated on by Sir William Macewen a few years ago, affected by calcareous deposit and may give rise to perforation of the appendix and consequent peritonitis.

In the present case careful endeavour was made to ascertain how long the pin had been in the intestinal canal.

[1] Transactions of the Clinical Society of London, vol. xxxii.
[2] Brit. Med. Jour., 1899.

The patient states, however, that he has no recollection of ever swallowing a pin and, further, that he was never in the habit of putting pins in his mouth, so that one cannot be certain on this point. If one can draw a conclusion from the amount of oxidation which the pin had undergone it probably had not been long in the intestine as the surface was only slightly corroded. It is likewise impossible to say how long the pin occupied its position in the appendix but the period of two weeks prior to admission during which the patient states that he suffered increasing discomfort appears a probable one.

The inverted position of the pin was of interest, the head being within the lumen and directed toward the apex of the appendix, while the point, having first perforated the wall of the appendix itself, impinged upon the sac wall, thus acting as a hook and anchoring the appendix in its place. It is also of interest to note that notwithstanding the perforation of the appendix, which did not appear to be quite recent, there was no abscess formation although all the surrounding tissues were distinctly inflamed. Had the perforation occurred in the free abdominal cavity there can be little doubt but that peritonitis would have been given rise to. Thus the unusual situation of the appendix doubtless contributed toward the patient's recovery.

Glasgow.

FEMORAL HERNIA, HERNIATED APPENDIX, AND SUPPURATIVE APPENDICITIS DUE TO A PIN.

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AND
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THE following case, though manifesting four distinct conditions, some of which are of common individual occurrence, presents a combination of phenomena which, so far as we can find, has not been previously recorded in literature.

The patient, a widow, aged 63 years, had suffered from a small lump in the right groin for 24 years, which had hitherto given her no trouble and up to a few years ago had disappeared on lying down. There was no history of any previous acute abdominal symptoms. On May 10th, 1905, whilst lifting a heavy wash-tub she was seized with a severe pain in the groin and lower abdomen. There was a sense of something giving way in the femoral lump, followed by moderately severe pain. The patient did not take to her bed until the 13th, three days after the onset. On the 12th she took a journey of 12 miles back to her own home. She vomited several times on the first day of her attack but not subsequently. The bowels had been moved slightly on the second day of her attack, though flatus had been freely passed up to the moment she was seen by us in consultation, that being in the evening of May 13th, three days after the onset of the pain.

On examination the patient was found to be well nourished and perspiring freely, with a pulse of 80 per minute, of good quality, and a temperature of 99·6° F. The tongue was covered with a thick white fur. The abdomen was soft and, except close to Poupart's ligament on the right side, was not tender. She still complained of pain in the region of the right groin, though the acuteness of this had abated. Situated in the right femoral region was a more or less rounded mass of about the size of a duck's egg. It was entirely below Poupart's ligament, the skin over it was slightly reddened, it was tender on manipulation, gave a distinct impulse on coughing, was semi-fluctuating in consistence and non-resonant. Per-rectal and per-vaginal examinations showed that the uterus and its appendages were free. A diagnosis of "inflamed femoral epiplocele" was made. In view, however, of the absence of urgent symptoms, the late hour of the night, and the general environment of the patient we decided to postpone the operation until the following day. In the meantime the skin area around the mass was cleansed and treated with repeated antiseptic fomentations. On the following day the constitutional symptoms were much the same, the pulse being 84 and the temperature 100°. The patient was still passing flatus freely. The local mass, however, had increased very rapidly, becoming more diffuse. The skin over it was now of a dusky brown colour and the percussion note was distinctly resonant. We thought that these conditions suggested either a rupture of a part of the lumen of a loop of gut (Richter's hernia) or a gas-containing abscess.

Operation.—Chloroform having been administered, an incision over the mass was made, an abscess containing about two ounces of fœtid pus and surrounded by ragged gangrenous walls was evacuated, and a pin, incrusted with fæcal matter, was found lying very much in the same position as is shown in the illustration. Nothing resembling

Anterior view showing pin in situ at the bottom of the gangrenous abscess.

a hernial sac could be distinguished up to this point. The whole gangrenous mass was isolated down to the saphenous opening. It was quite easy on getting behind the mass to define the hernial sac proper. After carefully covering up the gangrenous area with gauze, this was opened and the contents were readily recognised as a thickened appendix and a small mass of omental tissue. The appendix was withdrawn and amputated close to the cæcum, the omental loop was divided, and both were pushed just within the abdomen. A strand of iodoform gauze was inserted into the femoral canal, partly to act as a drain to the appendical stump but chiefly to protect the peritoneum from becoming infected from the gangrenous Scarpa's triangle. A large drainage-tube was passed into the bottom of the wound and the skin margins were approximated by silkworm gut sutures.

The mass shown in the illustration consists of inflamed and necrotic omentum and superficial fascia into which the tip of the appendix is firmly imbedded. The appendix itself is much thickened and indurated, especially the portion which is imbedded in the necrotic fat. A probe can be passed along the appendix and it emerges at the bottom of the abscess cavity. Films and cultivations from the fœtid pus showed two distinct organisms: (1) bacillus coli, which was very pathogenic to rats; and (2) a micrococcus which was non-pathogenic to rats.

The wound healed very slowly owing to the sloughing of some of the livid skin covering the abscess cavity. In something like eight weeks, however, the wound had quite healed and to all appearance a very satisfactory radical cure had taken place. Up to the present time there has been no return of the hernia and the patient has enjoyed good health. In this case there was no history of swallowing a pin.

Remarks.—It is by no means common to find the appendix the only visceral content of a femoral hernia, still less common is it to find such a herniated appendix the seat of inflammation, and still more rare to find the exciting cause of such inflammation to be a foreign body such as a pin. It is probable that the pin had lain in the patient's appendix for some time, inducing slowly a chronic appendicitis,

adhesions, and, owing to the heavy strain, it suddenly perforated the appendix wall and thereby set up symptoms of acute perforating appendicitis. Such a combination of circumstances constitutes this case, so far as we can find in literature, one of unique occurrence.

In reviewing the facts which can be gleaned from previously published cases allied to the present one it will be convenient to divide them into (1) hernia of the appendix; and (2) foreign bodies as a cause of appendicitis.

1. *Hernia of the appendix.*—The first case published of hernia of the appendix is that of Morgagni in 1751. The appendix has occurred in the sacs of the following hernia: inguinal and femoral on both sides, obturator, and umbilical. Out of 3770 necropsies upon hernial patients Halle (Wittenberg) found the appendix within a hernial sac in 1·2 per cent. Of 101 cases collected by Prüss, 21 were in children of two years and under. From this age the frequency steadily falls until the fifth decade, when it suddenly increases. Hernia of the appendix is thus a condition commonest in early childhood and advanced life. This fact was strongly borne out by Rivet in his series of cases. Rivet found that men were more prone to the condition than women in the ratio of 70 per cent. in men to 30 per cent. in women. In women the appendix occurs more commonly in a femoral sac than in an inguinal one. Taking all the cases together, Rivet found that from 70 to 80 per cent. were inguinal, from 20 to 30 per cent. were femoral, from 2 to 3 per cent. were umbilical, and 1 per cent. was obturator. McAdam Eccles found in revising the reports of St. Bartholomew's Hospital that 17 cases had been inguinal and 13 femoral.

The hernia may be congenital or acquired. Sandeford and Lettan found the appendix herniated at birth. The majority of congenital cases present patent inguinal and femoral canals at birth, which later become occupied by the appendix or other viscera. The cause of the congenital variety has been ascribed to adhesions between the appendix or cæcum and the peritoneum covering the testis and the gubernaculum. Confirming this theory is the fact that acute and chronic inflammations of the peritoneum in the fœtus are common according to the observations of Virchow, Rokitansky, Orth, and others. It is certainly a fact that the appendix, when found in the hernial sac of a child, is almost always adherent. The cause of the acquired form is no doubt the same as in hernia of any other abdominal viscera. As Prüss pointed out, the cæcum is probably the first to enter the sac, dragging with it the appendix, which becomes adherent to the sac wall. The cæcum may then become withdrawn, leaving the anchored appendix the only visceral content of the sac, as in the case under discussion. The commoner complications which are liable to ensue in a hernia of the appendix are the following: (1) irreducibility; (2) cystic dilatation; (3) inflammation; and (4) strangulation.

It is quite impossible to diagnose accurately the presence of a normal appendix within a hernial sac; a cord-like content may lead one to suspect it but never to be sure of it. When strangulated the condition is likely to be mistaken for a Richter's hernia, a strangulated Littré's hernia, or a strangulated epiplocele. Acute inflammatory complications of an appendix within a hernial sac are by no means uncommon, and one or two of them have been due either to a foreign body or to traumatism. The condition most often mistaken for appendical inflammation is strangulation. In the former, however, the vomiting and obstructive symptoms are trivial, the temperature is raised, the local conditions present more inflammatory reaction, such as œdema and redness, and the percussion note, though dull at first, may within a few hours become resonant owing to the accumulation of gas within the abscess cavity. The lump is less circumscribed in inflammation owing to the infiltrating nature of the process. It is very doubtful, however, if the diagnosis can be carried further than an inflamed hernia.

The treatment of a hernia of the appendix is to remove the appendix and to do a radical cure in the ordinary way. If the appendix is the seat of chronic or recurrent inflammation it may be dealt with quite safely in a similar manner. If, however, a perforative lesion has occurred or an abscess has formed the treatment must be so ordered that the safety of the life comes before the question of an efficient radical cure. The appendix is removed and adequate measures are adopted to shut off the peritoneal cavity and to insure proper drainage.

2. *Foreign bodies.*—The majority of cases of appendicitis are not associated with foreign bodies or concretions. True foreign bodies are rare, whereas concretions are common. It is probably a fact that concretions do not play a very important part in the etiology of appendicitis. The rarity of true foreign bodies is evident from the following statistics: A. O. Kelly, in examining 460 cases of appendicitis, found a pin in one case; Barling, in 500 cases, found one foreign body; Hawkins, none in 67 cases; Bell, in 1000 cases found five foreign bodies; Murphy found foreign bodies present in 3·5 per cent. of his cases; whereas Fitz and Matterstock, writing as far back as 1886 and 1880 respectively, found them present in 12 per cent. of their cases. It is more than likely that many enteroliths were included in this high percentage. Of 1000 cases recorded in the Johns Hopkins Hospital foreign bodies were present in four cases. Many of the seeds recorded in older literature were no doubt fæcal concretions which had assumed the well-known appearance of a cherry or date stone. The following foreign bodies have been found in the appendix or within appendical abscesses—pins, shot, bones, hairs, bristles, seeds, gallstones (only recognisable by chemical examination), nutshell, and parasites, such as tapeworms, lumbricoids, threadworms, trichocephalus, echinococci, and bilharzia.

Large bodies passing along the alimentary canal could not wander into the appendix; small bodies, and especially pins, are entrapped with remarkable frequency. In reviewing the literature bearing upon this subject one is struck with the number of cases in which a pin was the foreign body present. In every one of these cases the pin must have been either consciously or unconsciously swallowed and for one pin entrapped by the appendix in its passage towards the rectum, very many must escape the trap. It suggests to one's mind the feeling that pins pass through the alimentary canal in greater numbers than we care to think possible.

Up to the present time some 50 cases of appendicitis associated with pins have been recorded. Kelly and Hurdon have collected some 46 of these and supplied a short history of each in their recent text-book on the appendix. Taking all the recorded cases together the following important facts are brought out. Of the 50 cases 25 were male, 18 were female, and in seven the sex is not stated. Of the 25 males 11 occurred in boys below puberty; whereas in the 18 females six occurred in girls below puberty. A history of consciously having swallowed a pin could only be discovered in six cases out of the 50. In 38 cases the form of the appendicitis was perforative or suppurative and in 12 it was catarrhal or recurrent. In the perforative or suppurative group the great majority formed acute or chronic collections of pus, only four or five giving rise to rapid general peritonitis. In no fewer than nine cases there were symptoms of pyæmia with abscesses in the liver. Fistulæ occurred in four of the cases, two being purely fæcal, one between the appendix and the bladder, and one between the appendix and the right ureter. The mortality following operation in the suppurative cases is appallingly high; in no fewer than 23 out of the 38 cases death took place, seven recovered, and in the remaining eight the termination of the case is uncertain. Of the 12 catarrhal or recurrent cases ten recovered and two died. Of the 50 cases of pin appendicitis two occurred in a hernial sac, both being inguinal, one was suppurative and the other catarrhal; in both recovery took place after operation.

A brief mention may be made of the other foreign bodies producing appendicitis. Shot has been found in eight cases; pieces of bone, especially fish bones, in eight; lumbricoid worms in nine; threadworms in ten; and other parasites in four.

In determining the exact rôle which the foreign body plays in appendicitis it must be remembered that many of them which lodge in the appendix are probably expelled again without producing any symptoms of inflammation. In at least two of the 50 cases of pin appendicitis the pin had been swallowed for one year in the one case and for two years in the other. In many of the cases in which there was no history of pin swallowing the pin when discovered had become incrusted with concretion, showing that the foreign body must have been lodged in the appendix for some time prior to the supervention of an acute attack of inflammation. In several of the cases the onset of the attack dated from a trauma, such as a blow or a kick on the abdomen. It seems quite certain that the presence of a foreign body within the appendix does favour the production of appendicitis in virtue of the physical injury which it tends to produce there and because of the impediment which it offers to the successful emptying of the normal appendical secretion. It is probable

that the majority of foreign bodies lie for an indefinite time in the appendix, gradually producing a chronic inflammation which may or may not end in suppuration.

DIVERTICULUM OF THE BLADDER; PROSTATIC OBSTRUCTION; OPERATION.[1]

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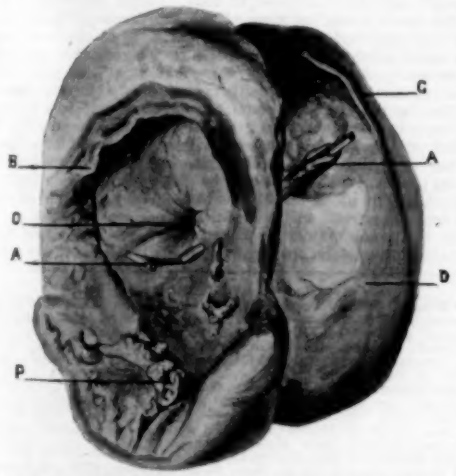
THE notes of this case may create a rather greater interest to-day than they would have done a few years ago when operations upon the prostate were not amongst the recognised duties of the surgeon, whilst the suprapubic method of opening the bladder may lead to the discovery of diverticula formerly met with in the post-mortem room for the first time. Examples of diverticula of the bladder have been found where no obstruction to the outlet of the bladder was present but the case in point comes under the category of those in which the diverticulum is due to stricture of the urethra or to enlarged prostate causing obstruction to the flow of urine, whereby a bulging of the bladder wall is gradually induced.

The patient, a miner, aged 62 years, was seen on Feb. 16th, 1904, in consultation. Bladder symptoms had existed for about two years. At first there was a poor stream of urine and then retention. Instrumental help was required and when the distension was painful violent straining efforts were made and were observed by others. The next stage was the self use of the catheter and the urine becoming foul and hæmorrhagic. Believing that the cause of the trouble was an enlarged prostate I advised operation. There was a strange fact, however, to note. When the patient passed his catheter and drew off urine he did not seem to obtain the relief expected either by himself or by others, and I could not satisfy myself that this continued discomfort arose from distension of the bladder.

The prostate was removed on Feb. 19th, 1904, a by no means large gland being readily turned out. The finger at the same time discovered an orifice leading into a large

FIG. 1.

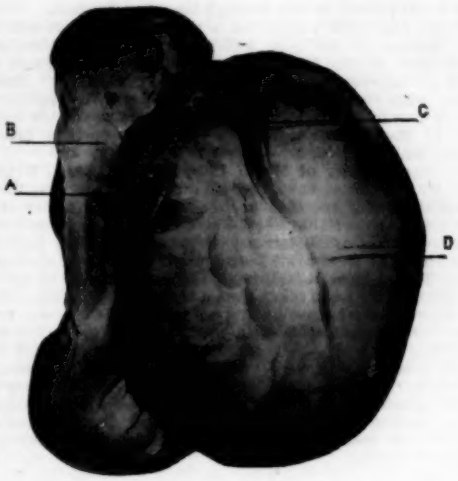


A A, Ureter with vesical terminations. B, Cut edge of bladder. C, Vas deferens. D, Diverticulum. O, Opening between bladder and diverticulum. P, Site of prostate gland.

cavity at the back of the bladder and placed within the hollow of the sacrum. The patient died in 48 hours with uræmic symptoms due to pyelonephritis and an abscess in the right wall of the pelvis, apparently situated within the obturator internus muscle.

The illustration (Fig. 1), from a sketch, shows the front wall of the bladder cut away and the thickened wall B. In the centre is the orifice O leading to the diverticulum and below this orifice are the openings of the ureters indicated by sticks thrust into the lumina (A). The ragged cavity which held the prostate is shown at P. Fig. 2

FIG. 2.



A, Ureter. B, Cut edge of bladder. C, Vas deferens. D, Diverticulum.

shows the diverticulum lying behind the remains of the bladder; the ureter A is seen passing through the bladder wall, unaffected by the diverticulum D. The vas deferens C passes over the wall of the diverticulum down to the base where the detached vesicula seminalis lay. In other words, to the posterior surface of the bladder was attached a large diverticulum, having a spherical outline, somewhat flattened from before backwards, and measuring nearly four inches in its chief diameter. The diverticulum communicated with the cavity of the bladder by an aperture of the size of the

FIG. 3.

R, Rod passing through prostatic urethra.

forefinger in the posterior wall just behind the trigone. The vasa deferentia and vesiculæ seminales had become detached from the bladder and were lying on the cyst. In the course of its development the cyst had gradually separated the sheath of the bladder (derived from the recto-vesical fascia) and consequently displaced the vasa and vesiculæ which are imbedded in that sheath. The ureters were unaffected by it. The wall of the bladder was much hypertrophied and its interior was ragged from chronic cystitis with ulceration. The cyst wall was composed of mucous membrane, a very thin

[1] A paper read at the meeting of the Pathological Society of London on Oct. 17th, 1905, when the specimens were exhibited.

layer of unstriped muscle and a thick coat of inflamed fibro-fatty tissue with extravasated blood in it.

The prostate (Fig. 3) is misshapen, the lateral lobes are merged into a projecting central lobe which overhangs the outlet of the bladder. A small glass rod R is lying in the prostatic urethra. There can be little doubt that prostatic obstruction created the straining efforts which ended in the formation of the diverticulum. These diverticula are stated to possess no muscular wall of their own, but according to Tillmanns[2] either all the layers of the bladder wall bulge out at some particular point or only the mucous membrane which has pushed its way through the muscular coat.

In the case related there was a thin muscular coat seen in the section of the cyst wall. According to Schmaus[3] separation of the fibres of muscle allows the mucosa to protrude between them and thus "diverticula form. These occur with obstacles to the outflow and may be multiple." In my case in addition to the large sac there was in the right side of the bladder a foramen apparently opening into a second small sac.

In THE LANCET of March 18th, 1899, Mr. G. A. Wright and Mr. W. Coates have recorded a case where a cyst three times the size of the bladder opened by a small orifice near the mouth of the right ureter. There was no obstruction in the urethra or prostatic enlargement. The man was 38 years of age and died from cystitis and urinary fever. A specimen (No. 3663A) is in the Museum of the Royal College of Surgeons of England taken from a man, aged 75 years. The bladder filled the pelvis and to the right was an oval sacculus communicating with the bladder by a small round aperture one and a half inches to the outer side of the right ureteral orifice. A drawing of a case is given in Coates's "Manual of Pathology." Wulff of Hamburg in 1904 operated upon a congenital diverticulum but I cannot conceive that any operation for removal of the diverticulum could have been undertaken in the case related with any hope of success.

Carlisle.

[2] A Text-book of Surgery (translated by Tilton and Stimson, 1900).
[3] Text-book on Pathology.

A CASE OF INTRANASAL CHANCRE SIMULATING NASAL DIPHTHERIA.

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ASSISTANT MEDICAL OFFICER AT THE GROVE FEVER HOSPITAL OF THE METROPOLITAN ASYLUMS BOARD.

A MARRIED man, aged 28 years, was admitted to hospital on March 7th, 1906, certified to be suffering from nasal diphtheria. On the medical certificate it was stated that diphtheria bacilli had been found in the culture. There was a previous history of diphtheria 14 years ago. For the last month his nose had been sore but it was not until it began to swell that he sought medical advice. On admission the lower two-thirds of the organ presented a most unsightly appearance, being considerably swollen and of a dusky-red colour. The right ala nasi, which was thickened and very tender, was lined on its inner surface by a membranous deposit from which on pressure a sanious discharge exuded. There was no excoriation of the philtrum such as is usually present in severe cases of nasal diphtheria. The left submaxillary and sterno-mastoid glands were considerably swollen and slightly tender. The buccal mucosa and fauces were normal. On the chest and abdomen a polymorphic eruption was present which from the absence of pruritus had hitherto escaped his attention. The nasal obstruction, causing frequent sniffing and use of the handkerchief, severe right frontal headache, and the consciousness of his deformity, all combined to render his condition one of considerable distress, though not of gravity. The temperature on admission was 99·2° F. but became normal the same evening and remained so till his discharge. A smear preparation and three successive cultures of the nasal membrane showed no diphtheria bacilli. A similar examination of the throat was also negative. The headache and partial impediment to respiration caused him to pass a restless night. During sleep it was noted that he lay with his mouth open and snored. The following morning there was no improvement. Though no history of direct or mediate exposure to venereal infection could be obtained the adenopathy and polymorphic eruption suggested the diagnosis of intranasal chancre. Mercury with chalk (two grains three times a day) were therefore administered and the nostril was swabbed frequently with black wash. The beneficial effects soon became apparent. On the 10th the nose, though still tender, was less swollen and red and showed a branny desquamation over the inflamed area. The headache had gone. The voice, hitherto nasal, soon became clear. The deposit within the nostril now consisted of dried-up crusts which gradually separated, revealing beneath a slightly raised granular swelling which resembled in its appearance and induration the primary lesion found in more usual situations. In the course of the next ten days the outer surface of the nose gradually regained its normal appearance and the intranasal swelling diminished in size. The glandular affection subsided more slowly but soon lost its tenderness. Beyond slight epistaxis which followed blowing the nose on the 13th, nothing further of note occurred and the patient was discharged on March 22nd.

In striking contrast to tertiary lesions of the nose intranasal chancres are so rare that Garel in 1900 had been able to find only 45 cases on record, six of which he had seen himself.[1] A search through subsequent literature has enabled me to add 14 more,[2] which thus constitute a total of 60 cases, including the present one. The etiology of this localisation of the primary lesion is in Fournier's words, as a rule, impenetrable and mysterious. In only two could a history of direct or naso-genital contagion be obtained.[3] Infection by the conveyance of the syphilitic virus to the nostril by the finger-nail is more common, either in consequence of venereal manipulations, or more frequently in syphilis insontium. Eight such cases were examples of professional chancres, four occurring in medical men[4] and four in nurses.[5] Inanimate objects may sometimes convey infection. Thus in Higguet's case a snuff-box[6] and in one of Collinet's cases a pencil were alleged to have been the infecting agents. Pre-existing lesions of the nasal mucous membrane were present in some cases. Thus Freudenthal's patient suffered from atrophic rhinitis, Chapuis's patient[7] had impetigo of the nostril, and in Jullien's[8] case there had been a recent severe injury to the nose. In the cases of Brunon and Gaetano picking of the nostril was an inveterate habit. In the majority of cases, however, among which my own patient is to be classed, no such history could be obtained. The diphtheroidal character of the lesion in the present case is of interest in that, though found in some of the other cases,[9] in none of those hitherto published was the case regarded as diphtheria. Chancre of the tonsil, on the other hand, a much commoner extra-genital lesion, has occasionally been mistaken for diphtheria. In one such case organisms morphologically indistinguishable from Klebs-Löffler bacilli were isolated but were found to be non-pathogenic to guinea-pigs.[10] It is probable that the bacilli found prior to my own patient's admission were of this class. It has been pointed out by Fournier that the membrane sometimes present on chancres can be distinguished from that of diphtheria by its strict localisation and by absence of any tendency to spread and invade neighbouring structures.

In the great majority of recorded cases the lesion was situated close to the orifice of the nostril and, as in my case,

[1] Lyon Médical, 1900, p. 469.
[2] Brunon: Journal des Maladies Cutanées, 1904, p. 187. Calamida: Quoted in Centralblatt für Laryngologie, 1904, p. 125. Campbell: Journal of American Medical Association, May 5th, 1906, p. 1352. Collinet: Annales des Maladies de l'Oreille, 1901, vol. ii., p. 93 (two cases). David: La Syphilis Fœtale, 1905. Freudenthal: New York Medical Journal, 1901, vol. i., p. 805. Gaetano: Gazzetta degli Ospedali, 1904, p. 947. Gaucher et Boisseau: Archives Générales de Médecine, 1906, p. 825. Gellé: Centralblatt für Laryngologie, 1905, p. 87. Graef: Post Graduate, 1904, p. 48. Hunt: Liverpool Medico-Chirurgical Journal, 1906, p. 124. Lutati: Giornale Italiano delle Malattie Veneree, 1903, p. 151. Parker: THE LANCET, Jan. 26th, 1901, p. 238.
[3] Hulst: Quoted by Le Bart, Thèse de Paris, 1894. D'Aulnay: Annales de Dermatologie, 1895, p. 989.
[4] Fournier: Les Chancres Extra-génitaux, 1897 (two cases). Campbell: loc. cit. Freudenthal: loc. cit.
[5] Spencer Watson: Medical Times and Gazette, 1881, vol. i., p. 422. Calamida, Garel, Gellé: loc. cit.
[6] Quoted by Le Bart, loc. cit.
[7] Gazette des Hôpitaux, 1894, pp. 777 et seq., pp. 1103 et seq.
[8] Quoted by Fournier, loc. cit.
[9] Lermoyez: Annales des Maladies de l'Oreille, 1892, Part 2, p. 517. Thiblerge: Gazette Hebdomadaire, 1894, p. 198. Moure: Revue de Laryngologie, 1892, p. 461. Rueda: Ibid., 1895, p. 157.
[10] Boulloche, quoted by Fournier, loc. cit.

could be seen without the aid of a speculum. The reason assigned for this situation is that it is the part within reach of the finger which, as stated above, is the usual carrier of infection. In most of the cases the lesion has been situated on the septum. In Mendel's[11] case a symmetrical chancre occupied each aspect of the septum. The present case is thus exceptional and resembles that of Spencer Watson. The erysipelatous condition of the external nostril, so marked a feature in my case, was present in those reported by Thibierge,[12] Chapuis, Jacobi,[13] Parker, and David. It is due, as Thibierge points out, to a secondary infection. Chancres on the genitals occasionally, though not so frequently as extragenital chancres, are liable to the same complication. Tenderness of the glands, which is usually absent in syphilitic adenopathy, is due to the same cause. Tenderness of the enlarged glands was a special feature in the cases of Rueda, Bieck,[14] and Collinet. In Rueda's case suppuration of the submaxillary glands actually occurred. Affection of the nasal duct may produce lacrymation, as in Campbell's and Gaucher's cases, or even lead to a lacrymal abscess, as in Nettleship's[15] patient.

The symptoms, so prominent in my patient, may be ill marked, as in Marfan's[16] and Brunon's cases. In one of Garel's[17] cases the intranasal phenomena were so slight and the glandular enlargement so obtrusive that the patient thought she was suffering from mumps. It is exceptional for constitutional disturbances to occur, as in Spencer Watson's case, where high fever and great mental prostration were noted. In Freudenthal's and Campbell's cases the general symptoms were so predominant that the disease was first regarded as influenza. Many of the recorded cases resemble the present one in the co-existence of the primary and secondary lesions when the patient was first seen, so that a correct diagnosis was soon made, but in others the true nature of the lesion was not recognised till the appearance of the roseola some days or weeks later. In Lermoyez's[18] case the lesion was first mistaken for sarcoma, but the subsequent development of a typical roseola led to a correct diagnosis. In this connexion it may be said that the early involvement of the glands and the slight degree of epistaxis indicate syphilis rather than a malignant growth. In a few instances the chancre was regarded as a tertiary lesion till the secondary eruption developed. In the present case the diagnosis was established by the characteristic induration of the lesion, the enlargement of the submaxillary glands, the co-existence of the syphilitic eruption, and the rapidly beneficial effect of mercury. The ubiquity of syphilis combined with the prevalence of picking the nose makes it surprising that intranasal chancres are so rare. There can be little doubt that several cases pass unrecognised. In conclusion it may be said that the existence of a chancre in such an unusual situation is of interest not only from the standpoint of syphilography and rhinology but also from that of internal medicine inasmuch as the latent or misleading character of the initial lesion may throw light on the etiology of subsequent affections, notably tabes and general paralysis.

I am indebted to Dr. J. E. Beggs, medical superintendent of the Grove Hospital, for permission to publish this case.

Tooting.

EXAMINATION OF THE FÆCES.

BY DR. ROBERT BAUMSTARK.

THE examination of intestinal ejections is still a difficulty to the practitioner. It is a well-known fact that the important progress made in the last 20 years in the knowledge of the functions of the stomach is due to the Ewald "test breakfast" and the Riegel "test meals" which are recognised as trustworthy methods. A direct examination of the intestine is much more difficult. Up to now the only means of becoming acquainted with the functional efficiency of the intestine has been by means of testing in the laboratory. But there are many objections to this method: First, it is complicated and needs too many appliances and thus is useless to the practitioner; further, the residues in the fæces result not only from the food taken but also from the intestinal, liver, and pancreatic secretions, and from intestinal bacteria, which are all liable to individual changes.

To try to form an opinion of the capabilities of the intestine by means of examination of the fæces with *daily changing* food is impossible, for even in healthy individuals there are manifold nutritious elements which are not made use of and which are ejected in varying quantities in the fæces. A special diet must be adhered to and must fulfil the following conditions: 1. It must contain the necessary amount of calories and suitable proportions of the three chief groups of food-stuffs. 2. It must be digestible, taken readily, and agree well, in order that it can even be assimilated by a disordered intestine. 3. Coarse macroscopical remnants must not appear in the fæces. At the same time the consistency of the fæces must not be so fine as to lack the power of stimulating the bowel. 4. It must be easily obtained in any household. These conditions have at last been fulfilled after many years of experiment in a diet devised by Adolph Schmidt. This diet is as follows:—Morning: ½ litre (¾ pint) milk or ½ litre cocoa (made with cocoa powder 20 grammes, sugar 10 grammes, milk 0·1 litre, rest 0·4 litre water) and 50 grammes rusk. Before noon: ½ litre gruel (made with 40 grammes groats, 10 grammes butter, 200 grammes milk, one egg, and 300 grammes water). Noon: 125 grammes minced beef lightly fried (so as to be raw inside) in 20 grammes butter, 190 grammes potatoes mashed with 100 grammes milk, and 10 grammes butter. Afternoon: The same as in the morning. Evening: The same as in the forenoon. Altogether the diet consists of 1½ litres milk, 100 grammes rusk, two eggs, 50 grammes butter, 125 grammes minced beef, 190 grammes potatoes, and 80 grammes oatmeal. This total represents 2234 calories.

In the greater number of cases, especially in the generality of slighter intestinal troubles, there is no difficulty with this diet. In some cases, however, especially in more serious cases, troubles may arise in the form of diarrhœa or constipation; or perhaps the patient cannot satisfy his appetite with this diet; or, again, he may not be able thoroughly to assimilate the diet. It is possible to remedy this latter difficulty by lessening or increasing the quantity of milk. Diarrhœa and constipation often disappear if one continues the diet four or five days instead of three. Diarrhœa often also passes off if instead of giving 1½ litres of milk alone one prescribes less, and in combination with cocoa, gruel, and mashed potatoes, or with the addition of brandy, barley water, or salicylate of soda (0·3 gramme in the daily quantity of 1½ litres.)

The quantity of meat may, if necessary, be a little reduced. It is hereby seen that alterations can be made to a moderately wide extent so as to adjust the diet to each individual. Again, the principal meal of meat and potatoes may be given in the evening instead of at noon. Toast can also be given instead of rusk. It should, however, be borne in mind that the preparation of the meat must be according to the above method—that is, raw in the centre—and there must also be the necessary quantity of carbohydrates. It is therefore not possible according to Schmidt to increase either the quantity of the meat or of the carbohydrates, for that amount has been chosen so that it may be entirely assimilated by the intestine. Schmidt therefore persists with milk, in spite of digestive difficulties. However, according to his calculations in from 5 to 8 per cent. of cases, the end is not attained owing to the irritation caused by the milk.

It has not yet been ascertained why this is so; possibly the sugar of milk is the cause (on account of its great osmotic and aperient properties) as lactic acid fermentation occurs easily and thus causes irritation of the mucous membrane of the intestine. It may be due also to the special conditions produced by the bacterial flora on the milk, so that numerous quantities of aperient toxins are formed. I myself now aim at using less pure milk for the test diet and being guided as much as possible by individual circumstances. When I learn that milk has not formerly agreed with the patient and that in spite of a prescribed milk cure relapses have occurred, I then at the outset reduce to a minimum the quantity of milk used with the gruel, cocoa, and potatoes, and under these conditions cases of disturbance are indeed exceedingly rare.

It is wise to examine the stools carefully before the test

[11] Annales de Dermatologie, 1895, p. 210.
[12] Gazette Hebdomadaire, 1894, p. 198.
[13] Dermatologische Zeitschrift, 1897, p. 407.
[14] Berliner Klinische Wochenschrift, 1897, p. 1078.
[15] Brit. Med. Jour., vol. ii., 1875, p. 363.
[16] Annales de Dermatologie, 1890, p. 449.
[17] Garel: D'Aulnay, loc. cit.; Kohn: New York Medical Journal, 1897, p. 421.
[18] Cf. Moure, Revue de Laryngologie, 1887, p. 385, and Garel, loc. cit.

diet. If these contain irritating matter and mucus the latter under the influence of the test diet generally disappear quickly. The examination of the fæces for remnants of undigested food is only to be started after the second or third motion when one can be certain that they possess the properties of the test diet—namely, an even consistency and a somewhat lighter colour. The more serious cases are best kept in bed and even with milder cases I should recommend as much as possible great quiet. To patients who are treated at home one can supply test-glasses (15 centimetres in height, 8 centimetres in diameter) and so lessen the difficulty of sending the fæces.

The systematic examination of the fresh fæces is (1) macroscopic; (2) microscopic; and (3) chemical.

The macroscopic examination.—This, the most important of all, establishes the consistency, colour, and smell of the fæces. The motion is thoroughly stirred with a wooden spatula and a quantity of the size of a walnut is put in a grater and ground down with a glass pestle with a gradual addition of distilled water to an absolutely fluid mass. When no more solid parts exist pour it on a large black plate. With normal intestinal action nothing but macroscopically recognisable remnants of cellular particles (rusk, gruel, cocoa) of the test diet should be found in the fæces. The following are of importance as pathological food remnants.

1. The remnants of connective tissue and tendons from the minced meat which has been consumed, and these owing to their light yellow colour, their fibrous form, and their firm consistency can be recognised and most easily distinguished from mucus. Where any doubt exists a small filament can be treated with a drop of acetic acid; in the case of connective tissue the filamentous structure vanishes; in the case of mucus it only then becomes visible. Quite isolated small sinewy filaments are to be found sometimes with quite normal digestions but when in great quantity they are always pathological.

2. Remnants of muscle which look like very small brown-coloured splinters of wood. They are soft, become smaller when pressed, and disclose under the microscope muscle structure. In many cases connective tissue and remnants of muscle are to be met with in the same stool.

3. Remnants of potato, sago, and similar transparent grain, which are frequently mistaken for mucus but which can be distinguished by their globular form and their hard consistency; they stand out above the level of the thin, spread out layer of the fæces. Under the microscope the potato cells appear to be either empty or filled with bluish (stained with iodine) coloured grains of starch.

The microscopic examination.—This is chiefly useful for the verification of the results obtained by the macroscopic examination; for example, in the differential diagnosis of connective tissue and mucus shreds. Three microscopic preparations are made, distilled water being added when the ground-up fæces are too hard. The first is simply a small particle placed on a slide and pressed by a cover glass into a thin layer. The second is rubbed up with a little drop of 30 per cent. acetic acid solution and held over a flame until it begins to boil; the third is rubbed up with a little drop of a strong solution of iodine in iodide of potassium (iodide 1, iodide of potassium 2, distilled water 50), and covered.

Under normal intestinal conditions the following should be observed in the preparations. 1. Preparation without addition: muscular fibres (flake-like formations coloured yellow and rounded at the edges with indications here and there of transverse striæ), some scattered small and larger yellow lime salts, light and dark yellow flakes consisting of sebates of lime, uncoloured (unstained) soaps, single potato cells empty, sparse remnants of chaff from gruel and remnants of cocoa where cocoa was given instead of milk. 2. In the second preparation, when it is placed under the microscope whilst still hot, the larger lime salts and soap flakes are melted to neutral fat drops which after they are cold become solidified into small sebacic acid flakes. 3. In the third preparation, which is brown-coloured from the iodine, the potato cells now violet (but not blue) and sometimes violet-coloured sporules (clostridium butyricum) are met with.

Pathologically the following may be observed in the three preparations. In No. 1 broken pieces of muscle tissue in larger number with more clearly defined transverse striæ and sharp edges, neutral fat drops, sebacic acid, and soap needles in such quantity that they form the largest part of the preparation, and an abundant quantity of potato cells with more or less well-preserved grains of starch. In cold acetic acid preparations there are pathologically such a number of sebacic acid flocculi that all of the other component parts are in the minority. In the iodine preparation are bluish coloured potato cells, as also scattered remnants of grains of starch, blue or violet sporules or bacterial flora, and oat cells which are yellow coloured from the iodine.

The chemical examination.—This examination, now taken in hand, begins with a determination of the reaction. Normally, the reaction of the fæces is very feebly acid or feebly alkaline and often amphoteric. The test is made by placing a strip of blue and red litmus paper on (not in) a portion of the fæces which has been mixed with distilled water. A marked deviation in one or the other direction is pathological. It would be best after this reaction test to apply the incubator test immediately in order to arrive at the amount of fermentation—that is to say, the amount of decomposable substance which is contained in the fæces.* In the lower part of a Strassburg fermentation tube are placed five grammes (of the size of a walnut, less in the case of hard stools) of the stirred-up but undiluted stools. It is then filled with water and closed with the indiarubber stopper in order to avoid air bubbles. The tube standing above the bottom vessel is now removed and filled with tap water; then after turning the bottom vessel downwards it is closed with the indiarubber stopper. The second tube, which has an aperture above, remains empty and serves to take up the water forced out by the rising gases. After this the tube is placed in the incubator for 24 hours at 37° C. For carrying out the sublimate test a small portion of the stools which have been mixed up with distilled water must be mixed with concentrated aqueous solution of sublimate and left standing for 24 hours in a small glass vessel. The normal colouring matter hydrobilirubin colours it red and the fresher the stools the deeper will be the colour. The green colouring of a part of the fæces is pathological; even when only under the microscope green-coloured particles are visible it proves that there is unchanged biliary colouring matter in the fæces. All these examinations described above would be best arranged in succession in the manner stated which with some practice would not occupy more than from 10 to 12 minutes.

I will now touch on another pathological product of the fæces—namely mucus. In many cases of sluggish motion without there being any symptoms of inflammation, a thin mucous coating of the fæces will be observed which causes the hard scybala to appear as if varnished. Many authorities do not regard this as arising from inflammation but look upon it as ejected secretion. But where mucous shreds are seen constantly deposited externally on the scybala and also mixed with them during a lengthy period of observation, the existence of an inflammatory alteration of the mucous membrane may be inferred. The smaller the mucous particles are and the more they are mixed with the fæces so much the higher is the part of the intestine from which they proceed. Their descent from the small intestine can only be assumed if the fæces are liquid and if the mucous flocculi are quite small and contain half-digested cells—that is to say, kernels of cells in their characteristic arrangement. The larger the number of such cells the higher the degree of inflammation. The bilirubin colouring matter in the sublimate test and the presence of bilirubin crystals in the microscopical examination strengthen the assumption of the mucus originating from the small intestine. Mucus in stools more often has origin from the large than from the small intestine.

The diagnostic conclusions to be drawn from the foregoing observations are as follows. The presence of connective-tissue remnants in the test-diet stools points with certainty to a disorder of the digestion, as only the gastric juice is able to dissolve raw connective tissue—i.e., from the centre and not from the well-cooked part of the meat. Achylia or hypochylia would usually be accountable for such a condition. Excessive peristalsis perhaps also plays an important part in some of these cases. Again, in excessive acidity associated with insufficient pepsine secretion (cases which not infrequently occur) the raw tissue meets with unfavourable conditions and appears again in the stools. A very minute examination of the stomach should be carried out in these circumstances. If muscle remnants are found macroscopically, or even in considerable amount microscopically, disturbance of the digestion in the small intestine may be inferred, for the stomach plays only an unimportant part in the dissolving of meat fibre and the digestion of meat does

not take place in the colon. With both connective-tissue and muscle remnants in the stools it may be concluded that both stomach and small intestine are deranged.

With regard to the digestion of fat, it is to be observed that slighter variations in the fatty contents of the normal stool have no diagnostic meaning, for every stool contains fat in the normal fæces to the extent of 23 per cent. of the dry substance. A morbid increase of the fatty contents is proved at the macroscopic examination by the clayey quality of the light-coloured, nearly white fæces, by the very sour reaction, by the copious quantity of the fæces, and by their filmy appearance when rubbed up. Microscopical increase of the sebacic acid flocculi in the cold acetic acid preparation and neutral fat drops and salts of lime and soap crystals in a native preparation confirm the diagnosis. If the sublimate test shows a complete absence of bile in the stools together with an increase of the fatty contents (in which case icterus also occurs), the cause of the disease is to be sought for in the biliary duct system. If, however, in conjunction with the increase of the fat contents (especially in the form of neutral fat drops in the native preparation) there are signs of muscle tissue simultaneously with the presence of hydrobilirubin and absence of mucus, then the pancreas is the seat of the disease.

In rare cases, where biliary deficiencies and pancreatic diseases are excluded, severe forms of intestinal disease, such as tuberculosis, amyloid disease, or tabes mesenterica may be the cause of the derangement of fat absorption. The digestion of albumin is then likewise disturbed, and as a rule prior to the impairment of fat absorption. Moreover, purely functional disturbances of absorption limited to fats are sometimes observed. The simultaneous appearance, however, of mucus and processes of decomposition are decisive as regards an organic disease of the intestinal wall itself.

A complete absence of red or green colouring in the sublimate test shows absence of bile in the intestine (and icterus exists). If icterus is non-existent, then it is a question of a temporary suspension of the secretion of bile. In the case of brown, fresh stools, absence of red colouring or a muddy colour would point to intestinal decomposition. When green colouring (bilirubin) is macroscopically demonstrated, or if green colouring of separate particles—for example, of muscle tissue—is seen microscopically, it shows too rapid a passage through the colon; if the entire stool is coloured green, then most probably the small intestine is also involved. If there is a simultaneous appearance of small mucous flocculi described above the cause is an inflammation of the mucous membrane of the small intestine.

In order to prove if there is any disturbance in the digestion of carbohydrates it is best to examine the starch particles of the food given in the test diet, chiefly the potato grains. In the potato meal normally there only appear in the fæces some empty violet-coloured potato cells. If under the microscopic and macroscopic examinations a great number of potato cells are to be seen with bluish-coloured starch grains scattered about or lying in their cells, then this shows a diminished digestive power for carbohydrates. This latter condition is frequently confirmed by a light-brown, frothy appearance and an acid reaction of the stools, by a stronger fermentation reaction (fermentation tube), and under the microscope the appearance of granulose sporules or minute fungi. This deficiency in the utilisation of the carbohydrates is regarded as functional disorder of a milder kind and is designated by Schmidt under the name of "fermentative dyspepsia." A negative result of the fermentation test does not exclude fermentative dyspepsia when the above-mentioned microscopic and macroscopic signs of defective digestion of the carbohydrates are present, as the fermentation may have terminated with the formation of acid products without any gas.

The incubator test.—After keeping the small fermentation tube in the incubator at 37° C. very little gas will be formed under normal conditions. If one-third or more of the tube fills with water, that is pathological. It certainly betokens a morbid increase of carbohydrate fermentation if the reaction of the stools now tested once again is found to be strongly acid instead of being only feebly acid as before. It indicates degradation of the albumin when reaction becomes more alkaline. When fermentation exists the fæces usually assume a lighter colour and smell of butyric acid; with decomposition, on the contrary, they become darker and have a very unpleasant smell. In the case of fermentation moreover, the formation of gases takes place more quickly and more freely, while with decomposition more slowly and more scantily. The signification of fermentation has already been explained above. Excessive decomposition of albumin occurs usually only in cases of severe diseases of the digestive tract—e.g., inflammatory changes of the mucous membrane of the colon, because it is especially the pathological products of the intestinal wall, mucus, serum, pus, which occasion putrefaction, while merely functional disorders of the digestion of albumin seldom give rise to decomposition.

After the details which I have given I do not think it is necessary for me to point out what important diagnostic conclusions are to be derived from these systematic, easy, and quickly executed examinations of the stools under the conditions of the test diet. These conclusions possess also just as great an importance from a therapeutic point of view in giving us a trustworthy basis for successful dieting.

Bad Homburg.

AN ANALYSIS OF THE RESULTS OBTAINED AT THE SIDLAW SANATORIUM

DURING THE TWO YEARS ENDING APRIL 30TH, 1905.

BY RONALD CAMPBELL MACFIE, M.A., M.B. ABERD.,
LATE MEDICAL SUPERINTENDENT TO THE SANATORIUM.

THE Sidlaw Sanatorium was built through the generosity of the late Provost Moncur of Dundee for the purpose of treating poor consumptives. During the first year its patients were derived chiefly from the working classes and during the second year chiefly from the poorer middle classes. It is not "a modified mansion house located in the vicinity of a large town, run upon lines of the strictest economy, and upon the medical and nursing side woefully understaffed." On the contrary, it is a well-built, well-equipped institution, erected on a carefully chosen site and specially constructed for the purposes it is intended to fulfil—in fact, in all essentials and details of position and construction it can compare favourably with the leading sanatoriums of Britain, while with regard to diet, the diet is as full and plentiful as at any of the more expensive sanatoriums. The results have therefore definite clinical and statistical value, even though too short a time has elapsed to allow of more than somewhat tentative and provisional figures.

During the year ending April 30th, 1904, 67 patients were discharged from the Sidlaw Sanatorium. Seven of these, for pecuniary and other reasons, stayed for less than a month and need not be further considered. In 24, or 40 per cent., of the remaining 60 cases the disease was arrested; in 20, or 33·3 per cent., there was more or less improvement; and in the remaining 16 cases, or 26·6 per cent., it was stationary or it retrogressed.

TABLE I.—*Showing the Result for the Year 1903–04.*

Patients discharged or who died.	Disease arrested.	Improved.	Stationary or worse.
60	24, or 40%	20, or 33·3%	16, or 26·6%

During the year ending April 30th, 1905, 88 patients were discharged. 11 of these were discharged as non-tuberculous or medically unsuitable. In 41, or 53·3 per cent., of the remaining 77 cases the disease was arrested; in 23, or 30 per cent., there was more or less improvement; and the remaining 13, or 16·7 per cent., remained stationary or retrogressed.

TABLE II.—*Showing the Results for the Year 1904–05.*

Patients discharged or who died.	Disease arrested.	Improved.	Stationary or worse.
77	41, or 53·3%	23, or 30%	13, or 16·7%

TABLE III.—*Showing the Results for the Two Years (1903–05) together.*

Patients discharged or who died.	Disease arrested.	Improved.	Stationary or worse.
137	65, or 47·4%	43, or 31·4%	29, or 20·2%

I classify as "arrests," cases in which the patients attain a condition of average robust health, become fit for suitable work, able to walk 15 or 20 miles without undue fatigue and without abnormal rise of temperature, with no sputum or almost none, with no tubercle bacilli or few, and with physical signs giving no evidence of active disease. I classify as "improved" all cases in which the temperature, the expectoration, the weight, and the general health show considerable improvement but in which there are still physical or constitutional signs of disease. Such a classification is the most practical and practicable I know and though it may mislead in individual instances yet it affords a sound basis for a general prognosis.

A sanatorium experience of over seven years has led me to anticipate that about 70 per cent. of the patients in whom the disease is arrested (as above defined) and about 10 per cent. of those who show improvement (as above defined) will, under average favourable conditions, maintain their health, but naturally the earlier cases are less likely to relapse.

The following analysis of the cases treated at the Sidlaw Sanatorium during the years under review will show how enormously the medical character of the cases influences results. During the year 1903–04, out of 21 early cases treated there was "arrest" in 14 cases, or 66·6 per cent., with disappearance of tubercle bacilli in eight instances; out of 30 advanced cases there was arrest in eight cases, or 25·8 per cent., with disappearance of tubercle bacilli in five instances; and out of nine very advanced cases there was "arrest" in two cases, with disappearance of tubercle bacilli in one instance. During the year 1904–05, out of 35 early cases there was "arrest" in 26 cases, or 75 per cent., with disappearance of tubercle bacilli in 19 instances; out of 37 advanced cases there was "arrest" in 15 cases, or 41 per cent., with disappearance of tubercle bacilli in three instances, while in five very advanced cases the patients all became worse. This relationship between the stage of the disease and the results is shown more clearly in the following tables:—

TABLE IV.—*Showing the Relationship between the Stage of the Disease and the Results during the Year 1903–04.*

Early cases.					Advanced cases.					Very advanced cases.			
Arrested.	Improved.	Worse or unchanged.	Died.	Total.	Arrested.	Improved.	Worse or unchanged.	Died.	Total.	Arrested.	Improved.	Died.	Total.
14, or 66·6 %	3	2	2	21	8, or 25·8 %	15	2	5	30	2, or 22·2 %	2	5	9

The tubercle bacilli disappeared in 40 per cent. of the early cases, in 16 per cent. of the advanced cases, and in 11·17 per cent. of the very advanced cases. The deaths among the early cases were 10 per cent., among the advanced cases 16 per cent., and among the very advanced cases 55 per cent.

TABLE V.—*Showing the Relationship between the Stage of the Disease and the Results during the Year 1904–05.*

Early cases.					Advanced cases.					Very advanced cases.				
Arrested.	Improved.	Worse or unchanged.	Died.	Total.	Arrested.	Improved.	Worse or unchanged	Died.	Total.	Arrested.	Improved.	Worse.	Died.	Total.
26, or 75%	7	2	0	35	15, or 41%	16	6	0	37	0	0	2	3	5

The tubercle bacilli disappeared in 54 per cent. of the early cases, in 8 per cent. of the advanced cases, but in not any of the very advanced cases. There were no deaths among the early or the advanced cases, while they numbered 60 per cent. among the very advanced cases.

These results show quite clearly, even allowing for accidental variations and for errors of classification, how largely, *ceteris paribus*, results must depend upon the stage of the disease in which treatment is commenced. Under the early cases I include cases with disease of one lobe or with limited disease of two lobes but without cavitation or marked and extensive consolidation; under the advanced cases I include cases with two lobes severely affected and cases with one lobe affected where there is some cavitation or marked and extensive consolidation; and under the very advanced cases I include all cases of disease with large areas of lung involved and with much constitutional disturbance. The terms merely indicate the anatomical extent of lesion and have no reference to the time during which the disease has persisted. The patients stayed on an average 15 weeks, gained on an average 16 pounds, and increased on the average 31 per cent. in muscular power, as measured by the dynamometer.

TABLE VI.—*Showing the Relationship between the Stage of the Disease and the Results during the Two Years (1903–05) together (137 cases).*

Early cases.					Advanced cases.					Very advanced cases.				
Arrested.	Improved.	Worse or unchanged.	Died.	Total.	Arrested.	Improved.	Worse or unchanged.	Died.	Total.	Arrested.	Improved.	Worse.	Died.	Total.
40, or 71·4 %	10	4	2	56	23, or 34·3 %	31	8	5	67	2	2	2	8	14

The tubercle bacilli disappeared in 50 per cent. of the early cases and in 12 per cent. of the advanced cases, but in only one case in the very advanced group. There were two deaths among the early cases and five among the advanced cases, while among the very advanced cases they numbered 59 per cent.

On comparing the results of the two years it will be seen that the results of the second year were considerably better than were those of the first year. This is due to the fact that the patients during the first year were drawn exclusively from the working classes and during the second year chiefly from the poorer middle classes. Consumption is notably a disease of poverty, and it is a disease of poverty, not only because poverty implies chances of infection from without but also because it implies constitutional vulnerability and opportunity for infection from within, because it implies not only seed but also soil. The poor are more exposed to infection and they are also more vulnerable and have less resistance, and the diminished resistance will remain even after the outward conditions of poverty are removed. A wide experience of both rich and poor patients has satisfied me that sanatoriums for the rich are bound to obtain better results than are such institutions for the poor, even though the cases be equally promising and the conditions equally favourable.

It has been suggested that the "personal equation" is the cause of the better results obtained at paying than at charitable sanatoriums, but I do not think that the suspicion is in general well grounded. The results are better at paying sanatoriums. Paying patients, as a rule, go earlier to sanatoriums; they stay longer, and they have better constitutions, and these facts alone are quite sufficient to account for tremendous discrepancies in statistics. A sanatorium with only early cases from well-to-do classes staying many months—a sanatorium well constructed with large airy rooms and through ventilation—a sanatorium where discipline is strict and diet rich, may well show a large percentage of "arrests"; whereas a sanatorium with only advanced cases, with poor diet, and with lax discipline will probably have no "arrests" at all. I myself have seen at one sanatorium an extraordinary succession of 15 or 20 early cases, all of which apparently threw off the disease, and at another sanatorium I have seen the very reverse—an almost unaccountable run of hopeless cases. Sanatoriums for the rich and for the poor, sanatoriums with early and with advanced cases, sanatoriums where the average gain in weight is 7 pounds and where the average gain is 17 pounds, sanatoriums strictly conducted and sanatoriums laxly conducted, will all have very different curative values. It will not do to estimate the curative efficiency of sanatoriums for the poor from statistics derived from sanatoriums for the rich, nor *vice versâ*. Attempts to draw general conclusions from the statistics of sanatoriums without due regard to their individual differences must result in confusion and contradiction, and sanatorium statistics can be of value only if the character of the cases and general conditions are taken into account. Further, statistics cannot be of much scientific value until observers use their terms in a definite, uniform

sense. At present the terms "cured," "arrested," &c., are most loosely and erratically employed. I would urge that the term "cure" should never be used and that the term "arrest" should refer to condition at discharge and have no reference to permanence of arrest, since permanence of arrest must depend on complicated factors of character, constitution, and environment which are largely beyond the calculation, control, and prescience of the statistician. In individual cases it may be possible to speak with considerable certainty of permanent arrest, but for purposes of general prognosis it will be found best and most convenient to classify together all such cases as have reached the point of improvement I have called "arrest" and to estimate that under average favourable conditions about 70 per cent. of these will keep well. The probability of relapses after discharge owing to bad environment, &c., must not be allowed to affect sanatorium discharge statistics, for the introduction of such an uncertain and inconstant factor would render a comparison of results still more difficult. The observer's first duty is to show the result of sanatorium treatment and to state the patient's condition at time of discharge, though he may point out that even in "arrests" there is a possibility of relapse—a possibility the greater the poorer the patient in money and self-control, and though he should, if he can, trace the after-history of patients and find out the proportion and cause of the relapses. I may mention here that I have inquired into the after-history of all the cases discharged from the Sidlaw Sanatorium during the first year and I have had opportunity of personally examining most of them, and I have found that while there have been numerous relapses among the cases discharged as improved, yet the great majority of those discharged as cases of arrested disease have kept their health. During the second year most of the cases admitted were drawn from the middle classes and owing to more favourable environment and better constitutions fewer relapses may be expected to occur than in the cases discharged during the first year.

Some have argued that the term "arrest" should not be used unless all "physical signs" have gone and I have known medical men inexperienced in sanatorium practice and prognosis tabulate their results on this arbitrary and pessimistic basis. But such a restricted definition would stultify statistics altogether, for during the short time most patients stay at a sanatorium the "physical signs" of disease rarely alter much and seldom or never quite disappear, and yet the actual severity of the disease may be marvellously mitigated, as proved by sputum, temperature, muscular tone, and other clinical and logical signs. As a matter of fact, "physical signs," though of definite value when considered in conjunction with other symptomatic features, have *per se* (after sanatorium treatment) very variable prognostic and diagnostic value; they may be slight and yet the prognosis may be grave; they may be pronounced and permanent and yet the disease may be obviously arrested. It is plain that catarrh and infiltration may persist after tuberculous disease is arrested and that tubercle bacilli may be found after the constitution is practically immune and invulnerable. As Dr. C. C. Chidell (lately superintendent of the London Open-air Sanatorium, Wokingham) says: "Râles, sputum, or tubercle bacilli should not necessarily prevent a case from being regarded as arrested." The very term "arrest" implies and connotes the possibility of an exacerbation of the disease, and the mistake lies not in using the term which is most suitable to the situation but in failing to explain its real clinical and prognostic significance. I have no hesitation at all in claiming for the Sidlaw Sanatorium 47 per cent. of "arrests," even though I know that many of these through inexplicable failure of nutrition or resistance, or through bad environment, &c., will eventually relapse, but equally I dare not use the term "cure" in a single case, even though in a certain number of cases tubercle bacilli and almost all physical signs have disappeared.

I have said that under average favourable conditions about 70 per cent. of "arrests" (as defined) will prove permanent, but in dealing with the results of charitable sanatoriums it must be remembered that the patients return to unfavourable conditions and it must be frankly recognised that sanatoriums for the poor have much less ultimate curative value than sanatoriums for the rich and that even the best of buildings, the best of air, the best of food, the most careful selection and treatment of cases will not suffice to secure good ultimate results unless the patients stay long enough under treatment and unless some provision is made to insure favourable circumstances under discharge. To arrest or half arrest the disease in poor patients and then to send them back to conditions under which they contracted the disease—to unhealthy work and poor food and impure air—is to encourage scepticism, to invite disappointment, and to waste money. In all sanatoriums which aim at obtaining the best economic results it is desirable to get cases early, to keep them long, and to send them back to good surroundings, otherwise we are just playing at Sisyphus.

In conclusion, I should like to insist on the importance of so-called over-feeding. I believe—however empirical the belief may be—that over-feeding favourably influences the disease. Almost all consumptives are naturally small eaters and naturally lean, and one rarely meets a patient who has been a gourmand and *bon vivant*, and this seems to me at least suggestive. I find, moreover, that the "arrests" at Sidlaw Sanatorium gained on an average over 20 pounds in weight, and though, of course, it may be argued that the great gain proved slight disease and much constitutional vigour, yet my impression after watching nearly 1000 cases is that over-nutrition does in some way, *per se*, aid the organism to combat and eradicate the disease—whether by causing an increased formation of opsonin, whether by altering the precise chemical constitution of the tissues or in some other way I cannot say. More than once I have seen a forced increase of weight (after temporary cessation of weight gaining) followed by coincident improvement in pulmonary symptoms and I may mention that all the febrile cases in which the disease underwent arrest gained enormously in weight. My experience certainly is that patients able to eat large meals, and who do eat large meals, up to the point of subjective sensations of over-eating do usually throw off the disease and that most of the cases which have undergone treatment with permanent benefit are cases which have increased largely in weight. I find, too, that the results obtained at sanatoriums "run on strictly economic lines" where the patients gain only seven or eight pounds in weight cannot, *ceteris paribus*, compare with the results obtained at sanatoriums where food is richer and more abundant and where eating is encouraged or compelled. It must not be forgotten that it was the good results obtained at Nordrach in Germany, where weight-gaining is considered so important, which gave such an impetus to sanatorium treatment in England. I should like to point out that at Sidlaw Sanatorium during my superintendentship only three meals a day were given, and without a special apportioning of diet ingredients, and that in no case was there any dyspepsia or vomiting due to over-eating, but rather in most cases a distinct increase in digestive power. Indeed, during over seven years' experience of sanatorium treatment, I have seen no case of dyspepsia or vomiting which could be attributed to large meals, unless in the case of sanatoriums where food is weighed out to all patients in equally large quantities irrespectively of individual need and capacity, or where the medical officer, from lack of experience or skill, apportions food in unsuitable quantities. In brief, I am convinced that the more a patient *can* eat the more he should eat and in view of the difficulty many patients have in eating I think that any tendency to depreciate "over-feeding" should be deprecated.

Experiments in scientific feeding are interesting and instructive and have obvious economic importance but in face of the results obtained at the Sidlaw Sanatorium and at other sanatoriums with which I am acquainted I am not prepared, without more conclusive evidence, to accept the generalisation that meals should be arranged and systematically weighed according to individual metabolic indications. It is possible that even the very chemical products of over-feeding may be themselves harmful to the bacterial invaders.

POOR-LAW MEDICAL OFFICERS' ASSOCIATION OF ENGLAND AND WALES.—The annual general meeting of this association will be held at the Trocadéro, Piccadilly Circus, London, W., on Tuesday, June 26th, at 6.30 P.M. At 7.30 P.M. the members and their friends will dine together, Surgeon-General G. J. H. Evatt, C.B., the president of the association, being in the chair. Members wishing to be present at the dinner are requested to communicate with the honorary secretary, Dr. Major Greenwood, 144, Stoke Newington-road, London, N. All Poor-law medical officers are cordially invited to be present.

A CASE OF CEREBRAL TUMOUR; OPERATION; RECOVERY.

BY HUGH SMITH, M.D. LOND.,
HONORARY VISITING PHYSICIAN TO THE SOMERSET HOSPITAL, CAPE TOWN.

With a Note on the Operation by C. C. ELLIOTT, M.D., B.S. Lond., *Honorary Visiting Surgeon to the Hospital.*

THE patient, a married woman, aged 44 years, a European, first consulted me on Sept. 7th, 1905, for pains in the head. The previous history revealed nothing of importance. She had always had good health and there was no suspicion of syphilis or tuberculosis. There was no history of tuberculosis or of insanity or fits in her family. For three weeks she had suffered from almost continuous headache in the left frontal and supraorbital region, with frequent exacerbations of an acute neuralgic character, also from occasional vomiting which occurred irregularly day or night without definite relation to the taking of food and unaccompanied by nausea or retching. For the last four or five days there had been weakness of the right arm and hand and some difficulty in expressing herself clearly in speech. Upon further inquiry her husband stated that her memory had been defective for some months past and that she was becoming increasingly listless and apathetic. There had never been any fits or localised convulsions and there was no history of injury to the head or of discharge from the ears or nose.

On examination the patient's expression and manner were dull and lethargic. She appeared to have difficulty in fully understanding questions and answered slowly and with hesitation. There was no true aphasia—sensory or motor. The right arm and hand were decidedly paretic. The grasp was weaker than on the left side, but she could pick up a pin, button and unbutton her dress, &c., and indeed execute all movements of the limb—although weakly—with the exception that she was quite unable to write. (The patient is right-handed.) The right leg was somewhat weaker than the left and there was slight paresis of the right side of the mouth. The tongue was protruded in the middle line. The ocular movements were normal; the pupils were equal, of moderate size, and reacted to light and during accommodation. Vision did not seem to be impaired. Ophthalmoscopic examination of the fundi revealed double optic neuritis. The knee-jerks were exaggerated, especially the right; there was no ankle clonus and the plantar reflexes were indefinite in type. Pressure over the left frontal and temporal regions caused tenderness and pain. There was no evidence of disease of the ears or nose. The urine was free from albumin and sugar. All the thoracic and abdominal viscera appeared to be normal. The temperature was 97·5° F. and the pulse was 54. The appetite was good but the bowels were very constipated. A diagnosis of intracranial tumour was made and on Sept. 12th I took the patient into the Somerset Hospital.

Progress of the case.—Some temporary partial relief of headache and vomiting occurred under treatment with iodide and bromide of potassium and regulation of the bowels by means of white mixture. The bromide was gradually lessened and discontinued; at the same time the iodide was rapidly increased until 30 grains four times a day were being taken. In spite of treatment the case speedily developed. The optic neuritis increased, with much exudation and swelling, and numerous hæmorrhages—especially in the left eye. This was verified by Dr. D. J. Wood, ophthalmic surgeon to the hospital, who kindly examined the fundi on several occasions. Inequality of the pupils occurred, the right being larger than the left, and their reaction to light became sluggish. Vision gradually became impaired as the optic neuritis developed. On Sept. 27th some weakness of the right external rectus was noticed, and on protrusion the tongue deviated to the right although it could be moved to right or left at will. The facial weakness increased, as also did that of the right upper extremity. The dynamometer, which on admission had registered 13, now only marked 6; while the grasp of the left hand declined from 19 to 13. The paralysis, however, was never complete. With the exception of writing all movements could be carried out, although weakly and with difficulty. The paresis of the right lower extremity also increased and she became unable to stand unsupported. The knee-jerks became very exaggerated, especially the right, and ankle clonus appeared on that side. Babinski's sign was now present on both sides and Kernig's sign could be elicited.

The mental stupor steadily deepened, with marked somnolence, and it became increasingly difficult to obtain answers to questions or to hold the attention of the patient. Finally, the evacuations were passed in bed without control and apparently without consciousness. The headache and pain in the frontal area persisted and pain was also complained of in the upper cervical and cerebellar region on the left side. Marked tenderness was noticed over a small area in this locality a little behind the mastoid process as well as in that previously noted. Vomiting still occurred occasionally. There was no vertigo. Hearing remained good on both sides; the membrana tympani was normal. Smell and taste were unaffected. There were no ptosis or proptosis, no nystagmus, and no hemianopia. The auditory and visual word centres were not affected and there was no motor aphasia. At no time could any defect of sensation be detected and no epileptiform or other convulsions, tremors, &c., ever occurred. There was no deviation of the head or the eyes to either side. The heart was several times auscultated but no bruit was heard. The temperature varied between 97° and 99°; the pulse usually ranged from 60 to 70 and was regular; and the respirations were about 20. There was no disturbance of phonation or deglutition.

Localisation of the tumour.—The diagnosis of intracranial tumour being clear it remained to determine, if possible, its nature and exact position. Tuberculous and syphilitic growths seemed to be excluded by the negative history, the absence of evidence of these diseases in other organs, the absence of indications of multiple lesions of the brain, and, in the case of syphilis, by the non-improvement under the treatment. The rapid development of the case, on the other hand, pointed to malignant growth—glioma or sarcoma—or possibly to cyst. The paresis of the right side, affecting ultimately the arm, the leg, the face, the tongue, and the eye, indicated a lesion on the left side of the brain involving, directly or indirectly, some part of the motor tract. The wide distribution of the paresis and its comparatively mild degree, together with the absence throughout of epileptiform seizures, seemed to exclude the Rolandic cortex, a tumour of which, even if unattended by convulsions, would produce a monoplegia rather than a hemiplegia, or if ultimately involving the whole of one side would probably cause very pronounced paralysis of the part first affected before spreading to others.

The onset of the case with mental symptoms (dulness, apathy, loss of memory) and their predominance throughout, compared with the localising signs (right-sided paresis), seemed to point to tumour of the left frontal lobe with indirect pressure on the motor tract, and the absence of convulsions made it probable that the growth itself was subcortical. The paralysis having affected chiefly the arm and the leg indicated a lesion of the upper convolutions, while the actual onset of the paresis in the arm and hand and the complete inability to perform any of the movements of writing (motor agraphia) led me to localise the tumour at the posterior end of the second or middle frontal convolution just in front of the precentral sulcus—that is, in the position assigned by Exner and others to the cheiro-kinæsthetic centre.

Other possible sites of a tumour from which direct or indirect pressure might be exerted on some part of the motor tract, causing hemiparesis, were eliminated, or at least rendered improbable, from various considerations. Thus, the inferior frontal convolution—from absence of motor aphasia and from the slight degree of paresis of the face and tongue, the complex fine movements of which would readily be destroyed by comparatively little pressure; the orbital surface of the frontal lobe—from the integrity of the sense of smell, the absence of proptosis, unilateral blindness, &c.; the parietal lobe—from the absence of word blindness and hemianopia, and of sensory defect; the temporo-sphenoidal lobe—from the absence of word deafness and of defect of smell or taste; the occipital lobe—from the non-interference with vision; the internal capsule—from the relatively mild degree of motor paralysis compared with the rapidly deepening stupor and increasing optic neuritis and from the absence of sensory defect; the crus cerebri and pons—for the same reasons and from the absence of alternating or crossed paralysis; the medulla oblongata—from the absence

of disturbance of respiration and circulation, or impairment of articulation, phonation, or deglutition; and the cerebellum—from the absence of vertigo, tremors, and the cerebellar type of ataxia.

As the patient's condition was rapidly growing worse in spite of three weeks' treatment with iodide of potassium, it was considered advisable to trephine at the supposed site of the lesion without further delay. Even if the tumour were not found or could not be removed some temporary relief would be afforded from the excessive and rapidly increasing intracranial pressure. On Oct. 1st the positions of the Rolandic and precentral sulci, the superior and inferior frontal sulci, and the bifurcation of the fissure of Sylvius were marked on the shaven scalp. It was then noticed that one of the tender pressure spots of the scalp exactly coincided with the site chosen for trephining, although this region was less tender than the area behind the mastoid process on the same side. On the following day my surgical colleague, Dr. Elliott, operated and removed the tumour and I am indebted to him for the appended surgical note. The tumour was situated over the posterior two-fifths of the middle frontal convolution and the adjacent part of the superior convolution. It was of fairly firm consistence and roughly hemispherical in shape. The more rounded under surface was separated by a thin but definite capsule from the subjacent compressed cortex on which it lay. The upper and outer surface in contact with the dura mater—from which structure it seemed to be growing—was circular in outline and measured two inches in diameter. The depth of the tumour was one and a half inches and its circumference just over six inches. There had been hæmorrhage into it near its surface and the dura mater over it was very hyperæmic and adherent. On section it was found to be a mixed, spindle- and round-celled, sarcoma.

After-progress.—The operation was performed at 11 A.M. on Oct. 2nd and the patient was in a very collapsed state at its conclusion. At 5 P.M. she suddenly called out, the eyes became fixed and staring, and the teeth clenched. The head was turned to the right; the limbs were not affected. This fit lasted about one minute and had ceased before the arrival of the resident medical officer. There was no subsequent recurrence of convulsions. For a day or two the patient wandered mentally and the pulse was very frequent (120); but the mental condition rapidly improved, she became brighter and less somnolent, and answered questions readily and intelligently. No vomiting occurred after recovery from the anæsthetic. On Oct. 3rd the power of the right hand noticeably improved and the facial paresis was less marked. On the 5th the dynamometer registered 8 with the right hand and 21 with the left. The knee-jerks were less exaggerated and the ankle-clonus had disappeared. The right external rectus could move the cornea outwards to the external canthus: the tongue was protruded in the middle line. She was able to write her name, although not without mistakes, thus "Mary" was written "Marry." On the 6th the dynamometer registered 16 with the right and 18 with the left hand. There was no appreciable change in the condition of the fundi. On the 10th the facial paresis had practically disappeared and the movements of the eye and tongue were normal. The mental condition had much improved and was indeed quite satisfactory. The inequality of the pupils persisted. On the 12th Mr. Donald Gunn, acting for Dr. Wood, kindly examined the fundi and made the following note: "There is double optic neuritis much more marked in the right than in the left eye, probably subsiding in both. By the direct method I estimate the apex of the papilla as + 6 D. in the right and + 5 D. in the left; the swelling, however, is much less than this, as there is general hypermetropia of from 3 D. to 4 D. (according to the meridian chosen) in each eye. Right eye: The margin of the disc is obscured by the swelling, the base of which fades away into the retina in a corona of streaks of retinal infiltration and radially-placed linear hæmorrhages. Left eye: The edge of the disc is visible. There are a few hæmorrhages above and below it with some fine retino-choroidal changes but no areas of exudation. The vessels in this eye are about normal in size."

On Oct. 13th the dynamometer registered—right, 20; left, 23. The pupils were equal. The knee-jerks were very little exaggerated and were equal on the two sides. On the 17th there was still slight tenderness in the left cerebellar region. On the 20th the patient was allowed out of bed. On the 24th she could walk quite well and she was able to write her name correctly. The dynamometer registered 23 with either hand. The tenderness in the cerebellar region had disappeared. On Nov. 2nd Mr. Gunn noted that "the neuritis was definitely lessening, that the hæmorrhages had disappeared from the right fundus, and that the margin of that disc was beginning to show at the outer side. In the left eye, though the disc was clearly defined and there was no swelling of the nerve, hæmorrhages were noted below the disc." On the 11th, the wound having practically healed and an aluminium plate having been fitted over the trephined area, the patient left the hospital feeling perfectly well. The paresis had quite disappeared and the mental condition was entirely satisfactory.

The patient came at intervals to report progress. When last seen on Dec. 12th the wound was soundly healed and there was no bulging. No trace of paresis remained. She wrote her name, &c., with facility. The tendon reflexes were normal or possibly a little increased. Her mental condition appeared to be perfectly normal. She answered questions readily and intelligently and seemed keenly interested in her affairs. When questioned she stated that she remembered little or nothing of her stay in hospital prior to being allowed out of bed. Her memory, however, was now quite good again. She had remained free from headache, tenderness of the scalp, and vomiting. She said that she felt "perfectly well."

Mr. Gunn kindly examined the fundi again on this date (Dec. 12th) and I am greatly indebted to him for the following, as well as for the previous, notes. "Under homatropine—

Right: with $\frac{+ 4 \text{ D. sph.}}{+ 1 \text{ D. cyl.}}$ / 70°. V. = ⅔ partly.

Left: with $\frac{+ 3 \text{ D. sph.}}{+ 1 \text{ D. cyl.}}$ \ 80°. V. = ⅔.

Right eye: The optic disc is almost clear, being only slightly blurred by the grey striation of the overlying nerve fibres. There is no swelling. The vessels are almost normal in size and, except for some short kinks in the veins, have almost normal curves. There are some fine pigmentary changes both about the yellow spot and in the periphery, and one or two flat pale patches that probably represent former hæmorrhages. Left eye: there is incomplete optic atrophy but not much evidence in the disc itself of a past neuritis. The thicker layers of nerve fibres form a gauzy veil in front of an optic disc which has too hard an edge and too sharp a colour contrast with the surrounding retina. There are fine changes about the yellow spot and in the periphery as in the right eye. Below the disc there are still innumerable fine red brown spots, probably the remains of the hæmorrhages. The vessels are, if anything, below the normal size."

Remarks.—According to a recent estimate only 3·3 per cent. of all cerebral tumours are operable. The successful removal of one of these growths is therefore of sufficient rarity and interest to merit publication. Sarcoma, which occurs in about 20 per cent. of all cases, is "the form of tumour most easily extracted from the skull and the majority of the successful cases of removal of brain tumour have been sarcoma; ..... of 72 cases of sarcoma removed 52 recovered and 20 died" (Starr). In the present instance the tumour was on the surface, was encapsuled, and was readily removed by the finger. There seems, therefore, a very fair chance of the recovery being permanent. The rapid progress of this case is very striking, being, indeed, suggestive of abscess rather than of tumour; but against the former diagnosis were the unusual site of the lesion and the absence of discoverable cause of suppuration—such as injury, disease of the nose or ear or of bone.

The association of apparently complete agraphia with the presence of a tumour at the site assigned by many writers to the cheiro-kinæsthetic centre is a point of very great interest. In some cases of growth in this region reported by Starr and McBurney deviation of the head and eyes was noticed. In the present instance no such deviation was present except during the fit which occurred a few hours after the operation. The absence of convulsions, local or general, throughout the case (with this solitary exception) is worthy of notice in connexion with a tumour of the cortex so nearly adjacent to the motor area. Tenderness of the scalp to pressure and percussion was of very little localising value in this case. It is true that one such tender spot coincided with the actual site of the lesion, but equally or more tender areas were found in the prefrontal and cerebellar regions of the same side.

In conclusion I would draw attention to a point on which there appear to be some inexactness and uncertainty. As a preliminary to many operations upon the brain for tumour, abscess, Jacksonian epilepsy, &c., it is necessary to mark on the scalp the position of the chief fissures of the motor area of the cortex and especially of the fissure of Rolando. In text-books of operative surgery the upper end of this important fissure is said to be in the median antero-posterior line five centimetres—i.e., two inches—behind the "bregma." Unfortunately, however, this latter term is used differently by different authors, for while in Jacobson's "Operations on Surgery" and in most anatomical text-books the name "bregma" is given to the point of junction of the coronal and sagittal sutures, in Cheyne and Burghard's "Surgical Treatment," Part 5, the term is applied to a point midway between the glabella and the external occipital protuberance. Now in most skulls this midway point will be found to lie about one and a half inches behind the coronal suture and therefore there will be a corresponding difference in the position assigned to the Rolandic fissure according as we follow Jacobson's or Cheyne and Burghard's directions. As a matter of fact, the upper end of the fissure of Rolando lies two inches behind the coronal suture and therefore only half an inch behind the point midway between the glabella and the external occipital protuberance. That this is its exact position may be verified by another method of localisation—namely, by Reid's method of drawing a base line from the lower edge of the orbit backwards through the centre of the external auditory meatus and a second line at the posterior border of the mastoid process at right angles to the first. Where this second line intersects the median line of the vertex lies the upper end of the fissure of Rolando and

FIG. 1.

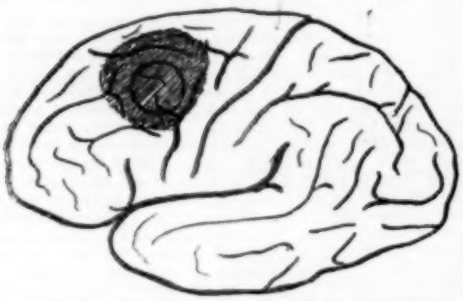
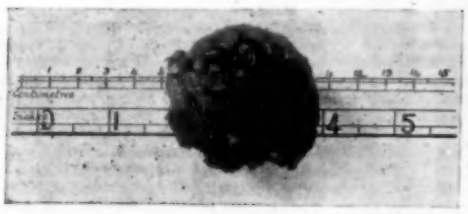


Diagram showing the situation and extent of the tumour and the relative position of the trephine hole.

it will be found to correspond with the position assigned to it by the former method. As in practice we have to deal not with the bare skull but with the living scalp-covered cranium on which it is not always easy to make out the position of sutures and fontanelles, it would seem advisable to leave the term "bregma" to the anatomists and to determine the position of the fissure of Rolando by actual measurement with reference to the point midway between the glabella and the external occipital protuberance, verifying the result by Reid's method.

FIG. 2.



View of upper and outer surface of the tumour, photographed upon a scale to show size.

For the photographs of the tumour from which the accompanying figures have been reproduced and also for a report on its histological characters I am indebted to the kindness of Mr. G. W. Robertson, Government bacteriologist.

Surgical note by Dr. ELLIOTT.—The operation was performed on Oct. 2nd. A semi-circular flap was turned up and a large trephine hole was made over the posterior third of the mid-frontal convolution in front of the precentral sulcus on the left side. There was considerable pressure beneath the dura mater. Beneath it was found a tumour, smooth and fairly firm, pressing upon subjacent cerebral tissue. A considerable portion of bone was removed in order to get at the tumour thoroughly, which was then shelled out easily. It was of about the size of a goose's egg and its removal left a large depression which, however, partially filled up by advancing cerebral substance even before the operation was concluded. There was a considerable amount of hæmorrhage. The wound was lightly plugged with gauze and most of the skin was brought together with sutures.

The patient was put back to bed with a very small, feeble pulse, but by next morning had recovered largely from the shock. On the 3rd the outer dressing was changed. On the 5th the plug was removed and a small one was re-inserted. The brain was expanding well and pulsation was quite evident under the operation flap. There was at first some appearance of hernia cerebri occurring but this danger was averted and the wound healed well after removal of the plug, with no rise of temperature or other bad symptom surgically. An aluminium cap was fitted over the area of the wound as a considerable portion of the skull had been removed.

Cape Town.

ON THE SPECIFIC NATURE OF THE SPIROCHÆTA OF THE AFRICAN TICK FEVER.

BY ANTON BREINL, M.D.,
ASSISTANT LECTURER IN TROPICAL MEDICINE.

(From the Runcorn Research Laboratories of the Liverpool School of Tropical Medicine.)

FURTHER studies of the spirochætæ of the African tick fever, brought home by Dr. J. L. Todd from the Congo Free State, have now been conducted. Through the kindness of Dr. Norris[1] and Dr. Terry, to whom I express my great indebtedness, we were able to compare the African strain with one derived from a case of relapsing fever in New York. This was identified by Novy[2] as spirochæta Obermeieri and in this note will be called "O" strain.

A short preliminary report[3] on the animal reactions of the spirochæta of the African tick fever was published from these research laboratories. Further inoculations were made in monkeys. Some species—e.g., Macacus rhesus, Cercopithecus—survived the infection and have apparently recovered, since tame mice and rats, in our experience the animals the most susceptible to the African spirochæta, inoculated with large amounts of the monkeys' blood, did not become infected.

A large Cercopithecus (Experiment 1015) was inoculated on Jan. 15th. It passed through the ordinary course of the infection, had two relapses, and after Feb. 15th no spirochætæ were seen in spite of twice-daily examinations by the thick-film method. It was re-inoculated on April 2nd and on the 5th a rise of temperature was noted from 102° to 105° F., but in spite of most careful examination no spirochætæ could be seen. A white rat sub-inoculated on the 5th did not become infected. The second re-inoculation of the monkey on May 5th was not followed by even a rise of temperature. A second "Sooty" monkey of the same species followed a similar course.

A Macacus rhesus was infected through tick bites. It had

[1] Norris: A case of Spirochætal Infection in Man, Proceedings of the New York Pathological Society, No. 4-5, p. 93. Preliminary Communication upon a Spirochætal Infection of White Rats, &c., Loc. cit., p. 162 ff.

[2] Novy and Knapp: Spirochæta Obermeieri, Journal of the American Medical Association, Jan. 13th, 1906.

[3] Breinl and Kinghorn: Observations on the Animal Reactions of the Spirochæta of the African Tick Fever, THE LANCET, March 10th, 1906, p. 668.

only one relapse and the sub-inoculation, four weeks afterwards, was negative. On the second evening after re-inoculation (eight cubic centimetres of heavily infected heart blood of a rat) two spirochætæ were seen in a preparation, but on subsequent occasions none could be found.

Similar observations were made on a large Cercopithecus callitrichus. The re-inoculation was followed by a marked rise in temperature and although no spirochætæ could be seen in preparations of the peripheral blood a rat inoculated with five cubic centimetres became infected after a prolonged incubation period of seven days. Those rats which had recovered from the disease were re-inoculated with large amounts of heavily infected blood at varying intervals. Of seven only one showed parasites in the blood after re-inoculation. Spirochætæ were seen eight hours afterwards; these disappeared within 12 hours and were never seen again. Monkeys inoculated with the strain of spirochætæ obtained from the New York case passed through a similar attack and had the usual relapses—one after a negative interval of 19 days. Re-inoculations with the same strain resulted in much the same manner as noted in similar infections with the African spirochætæ. In one case the sub-inoculation of a white rat on the first day after the re-inoculation of the monkey was followed by the infection of the rat, although no parasites could be seen in preparations from the monkey's peripheral blood. Further sub-inoculations made some days later from this monkey were not followed by infection.

The course of the disease in rats inoculated with "O" strain was quite different. The parasites were never so numerous and were never present for so long a time as in the case of the African strain (maximum—three days for the New York strain, 17 days for the African). Relapses were also observed but never more than two. With the African strain three relapses were quite common. The re-inoculation of four rats was followed by infection in only one case, the parasites being present in the peripheral blood for one and a half days.

From the above experiments the conclusion must be drawn that there exists, to a certain degree, active immunity against re-infection in the case of both the "O" and African strains respectively, as only a small percentage of the rats and monkeys became re-infected and then showed only a very slight infection. The monkey, mentioned above, which was inoculated twice with the "O" strain was inoculated after a certain time with the African strain. Spirochætæ were found in the peripheral blood on the next day and remained present for three days in the same way as was observed in monkeys inoculated with the African strain originally; in fact, the course of infection was similar to that of a *first* infection with spirochætæ in the monkey. In one rat (Experiment 1078) inoculated with the New York spirochætæ, which had been kept in defibrinated blood for 12 days, the blood examination did not reveal the presence of the parasites, most probably on account of insufficient observations. In spite of very careful examination no spirochætæ were seen in this rat after two re-inoculations one four weeks, the other seven weeks after the original inoculation. The rat, however, became infected after nine hours when inoculated with the *African strain*, eight days after the last re-inoculation, and has had two relapses since. Another rat (Experiment 1122) inoculated with "O" strain showed the parasites for three days and had one relapse. Five weeks later it was re-inoculated with the same strain but the parasites were not seen. When inoculated seven days later with the African strain the rat passed through a course of infection similar to that of the previously untreated control rat. Two rats which were inoculated with the African strain and which had not shown parasites after re-inoculation with the same strain (Experiment 1081) four and a half weeks after the original inoculation, with six cubic centimetres of heavily infected blood, and which, four and a half weeks after this again, were inoculated with the "O" strain, became infected in the same manner as the controls.

From the above one must draw the conclusion that the spirochæta of the African tick fever is of a species differing from that of the New York spirochæta in that each confers a relatively active immunity against itself but not against the other. I would therefore suggest for the spirochæta of the African tick fever the name of "spirochæta Duttoni."

Liverpool.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

A CASE OF RENAL CALCULI IN A CHILD.

BY DAMODAR BABAJI MANDHLE, L.R.C.P., L.R.C.S. EDIN., L.F.P.S. GLASG.,
RESIDENT MEDICAL OFFICER, PARK-HILL HOSPITAL, DINGLE, LIVERPOOL.

THE following case is of interest both from the occurrence of renal calculi in so young a person and, moreover, from the absence of definite symptoms pointing to the existence of the lesion which was found after death. The patient, who was a boy, aged three and a half years, was admitted to the Park-hill Hospital on May 15th, 1906, in a cyanosed and delirious condition, and died the next evening. He was sent in as a case of measles. On admission he was cyanosed and almost pulseless and was found to be suffering from the symptoms of broncho-pneumonia. In fact, he had some retraction of the thorax, was croupy, and the question of tracheotomy was considered. The symptoms all pointed to an acute attack of measles, with broncho-pneumonia as its special complication and a "toxic" heart. The child died suddenly from cardiac failure after having had all the usual treatment. Before the patient was taken ill with measles he seldom suffered much from any complaint that needed special attention.

At the necropsy the lungs were found to present patches of pneumonic consolidation scattered about on either side. The right side of the heart was slightly enlarged with a definite tendency to fatty degeneration. The spleen was normal. The left kidney was very congested but otherwise normal, while the right kidney was full of renal calculi, both in the pelvis and calyces, one, the largest, being in the centre of the pelvis. The calculi were of the oxalate of lime type; the largest of them measured half an inch in length and one-third of an inch in breadth, and was enveloped with a band of renal tissue, the rest ranging from the size of a pin's head to that of a pea, scattered all over. The other organs were normal.

I have to thank Dr. N. E. Roberts, the visiting physician, for allowing me to publish this case.

Liverpool.

FRACTURE OF A RIB DUE TO MUSCULAR ACTION.

BY S. HERBERT DAUKES, M.B., B.C. CANTAB.

ON Feb. 20th, 1906, I was called in to see a man, 52 years of age, who "felt something go" whilst straining at stool. On examination of the left side of the thorax at the spot where the maximum pain was complained of, the sixth rib was found to be fractured in the mid-axillary line. The condition admitted of no doubt from the point of view of diagnosis as deformity could be felt at the point of fracture and on pressure the deformity disappeared with distinct crepitus. The patient was an apparently healthy labourer subject to gout but free from any local new growth or other pathological condition which could account for the accident. He had never before had a fracture of any sort. The side was strapped and the rib united without further trouble. I believe that there are very few cases on record of a similar nature.

High Wycombe.

BRIGHTON AND SUSSEX MEDICO-CHIRURGICAL SOCIETY.—The annual meeting of this society was held on May 31st, Dr. A. Newsholme, the President, being in the chair. Dr. W. C. Chaffey was elected President for the ensuing year; Dr. A. Newsholme and Dr. J. F. Gordon Dill, Vice-Presidents; Mr. C. J. Oldham, treasurer; and Dr. R. Sanderson, honorary librarian. The members of the council appointed were Mr. W. A. Bowring, Dr. P. S. Eves, Mr. R. F. Jowers, Dr. F. J. Paley, Dr. L. A. Parry, Dr. J. W. Pugh, Dr. R. J. Ryle, and Mr. Hugh Stott. Dr. E. Hobhouse and Dr. W. Broadbent were elected secretaries for a third year.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv., Proœmium.

LEEDS GENERAL INFIRMARY.

A CASE OF SO-CALLED TRAUMATIC ASPHYXIA.

(Under the care of Mr. W. H. BROWN.)

A YOUTH, aged 16 years, was admitted to the Leeds General Infirmary on Feb. 3rd, 1906. Whilst at work his clothes were caught by a revolving shaft and he was whirled round many times before the machinery could be stopped. On admission his countenance was dusky and the discolouration extended as low down as the clavicles. There was no dyspnœa. Beyond a few bruises about the arms and legs the rest of his body appeared to have escaped injury. There were signs of fractured base of the skull (anterior fossa). The boy was extremely collapsed but quite sensible. During the next 24 hours the face and neck became œdematous, causing complete closure of both eyelids. The discolouration altered in character, parts being of an indigo blue, fading to a lighter hue, whilst there were patches of bright red skin dotted over the affected area. At the end of four days the swelling commenced to subside. The boy made an uneventful recovery. The discolouration had all disappeared at the end of 21 days.

Remarks by Mr. BROWN.—In the *Annals of Surgery* for 1904 Beach and Cobb report on a series of cases of "traumatic asphyxia," with remarks on an investigation into the pathology of the condition. They observe that it is always, practically, met with in young people, in whom the blood-vessels possess a good deal of elasticity, their oldest subject being a man aged 36 years. The gross cause producing "traumatic asphyxia" they define as "forcible compression of the chest, extending over some minutes, accompanied by entire cessation of respiration." Perthes is of the opinion that the cause of the discolouration is extravasation of blood, either minute or more extensive subcutaneous effusions or hæmorrhage. He considers that without any injury to the head itself marked effusion of blood can occur in the head and neighbouring tissues, as a result of severe contusions, with pressure on the thorax. This is caused by the transmission of the increased intra-thoracic pressure to the veins of the head and neck. Burrell and Crandon conclude that whilst there may be true hæmorrhage into the skin the fact that the colour disappears somewhat on pressure and also the manner in which the colour fades away favour the idea that the discolouration is due largely to a stasis of venous blood in temporarily paralysed and dilated capillaries. Sections of skin from the neck, according to Beach and Cobb, presented the appearance of normal skin. There were no signs of blood outside the blood-vessels.

My object in recording this somewhat rare result of traumatism is to raise the question of the name which has been bestowed upon it. The term "asphyxia," meaning as it does "pulseless," is surely no reasonable appellation for a condition such as has been described. The result of the accident was to produce rupture of large numbers of capillary vessels, causing both venous and arterial extravasation in the cellular tissue. I do not know whether in other cases which have been observed centrifugal force has been held to account for the condition. It would seem to me less misleading if we could do away with the term "asphyxia" in connexion with such like conditions. I am no lover of the many high-sounding appellations which fill our text-books and am loth to attempt to add one to their number, but I am bound to say that such a term as "traumatic œdema" would seem to me more accurate and less likely to cause error.

CITY HOSPITAL, FAZAKERLEY, LIVERPOOL.

A CASE OF HÆMORRHAGIC VARICELLA.

(Under the care of Dr. C. RUNDLE.)

THE patient in this case, a boy, aged two years, was admitted to hospital on April 22nd, 1906, suffering from an attack of varicella presenting the following features. Over the trunk and extremities were scattered vesicles and pustules having the appearance and distribution typical of an attack of varicella of moderate severity. The back, chest, and abdomen presented approximately 100 lesions in all; there were in addition three vesicles in the scalp, two on the right upper arm, several on the buttocks, the thighs, and the legs, but no lesions were observed below the elbows or the ankles. In some instances vesicles and pustules had been opened by scratching. A few late papules were observed on the back, the flanks, and the abdomen. The mother affirmed positively that the earliest spots appeared on the 20th (three days previously), up to which time the child's health had been uniformly good. A tendency to "bleed into the spots" had been observed by the parents on the evening of the 21st and when admitted to hospital hæmorrhages were observed to be present under the following conditions. First, petechiæ and ecchymoses were scattered somewhat profusely over the trunk, the shoulders, the thighs, and the legs, being especially prevalent over the sacrum, the crests of the ilia, and the thighs; secondly, the vesicles and pustules, which presented in every case a purplish hue, exuded a sanious fluid on incision; and thirdly, the bases of the ruptured lesions themselves presented a hæmorrhagic infiltration which could not be obliterated by such artificial means as cleansing with lotions, &c. At this stage no hæmorrhages beneath the conjunctivæ or from the mucous surfaces were observed and the general condition of the child was surprisingly good, there being no symptoms other than the nature of the local lesions to indicate the exceptional character of the attack. The cutaneous hæmorrhages continued to appear in greater profusion and during the afternoon of the 23rd an area of subcutaneous extravasation of blood about two inches in diameter occurred in the region of the left hip and later in the day a similar extravasation was observed over the right shin. During the evening of the same day a large extravasation of blood was noted beneath the ocular conjunctiva of the right side and at midnight a black hæmorrhagic staining of the lips and gums. During the night restlessness, delirium, cardiac depression, and other signs of toxæmia supervened. The child died on the following morning. A post-mortem examination was not possible.

Diagnosis.—At a late stage of the disease the facies of the child, the subconjunctival hæmorrhage, the bloody froth about the lips and gums, and the general purple hue of the skin were highly suggestive of hæmorrhagic small-pox. The varieties of this disease were, however, definitely excluded by the distribution, character, and course of the papular and vesicular eruption. The nature of the hæmorrhages, too, and their time of onset were not consistent with either of the varieties of hæmorrhagic small-pox. The child had been successfully vaccinated in three places 18 months previously. There had been no family tendency to hæmophilia. The conditions observed were not suggestive of purpura hæmorrhagica, Barlow's disease, or the other hæmorrhagic diseases of childhood. There were no arthritic manifestations.

Remarks by Dr. RUNDLE.—A violet tint in the papules, a few intravesicular hæmorrhages, and scattered petechiæ may frequently be observed in varicella, but true hæmorrhagic varicella is a clinical rarity. The literature on the subject is meagre. Bernouilli[1] and Baader[2] have described a petechial form of prodromal rash. Galliard,[3] too, says: "At the onset of varicella epistaxis is frequent, other hæmorrhages are exceptional." Comby[4] notes a case of varicella in a girl, aged eight years, presenting purpura, hæmorrhagic vesicles, ecchymoses in the right iliac fossa, pemphigoid bullæ, prostration, and death on the seventh day. It will be observed that this case as described by Comby bears a resemblance in its leading features to the case now under observation; in both instances there was an absence of bleeding from the kidneys and gastro-intestinal tract, ultimate prostration and death occurring towards the end of the first week. Andrew[5] describes a case associated with blood in the stools in which ultimate recovery took place.

Rolleston[6] states that in his case of confluent varicella with secondary fever a few intravesicular hæmorrhages were seen on the left frænum, the right knee, and the left ankle; no petechiæ or purpuric spots were observed between the vesicles nor were there any hæmorrhages from the mucosæ.

[1] Correspondenzblatt für Schweizer Aerzte, No. 11, 1880.
[2] Ibid., No. 19, 1880.
[3] Brouardel and Gilbert's Traité de Médecine, 1905, art. Varicelle.
[4] Traité des Maladies de l'Enfance, vol. i., 1904, p. 383.
[5] Transactions of the Clinical Society, 1890, p. 79.
[6] British Journal of Children's Diseases, January, 1906.

Medical Societies.

EDINBURGH MEDICO-CHIRURGICAL SOCIETY.

Exhibition of Cases and Specimens.—Early Diagnosis of Glaucoma.—Tumours of the Bladder.

A MEETING of this society was held on June 6th, Dr. J. O. AFFLECK, the President, being in the chair.

Dr. G. A. GIBSON exhibited a man, aged 68 years, with Symmetrical Trophic Lesions of both Thumbs without definite symptoms of syringomyelia. The condition had persisted 12 years in the right thumb and eight years in the left. There was no tactile, thermal, or dissociated anæsthesia present.

Mr. DAVID WALLACE showed a woman after Cholecystectomy for Septic Cholangitis. She had suffered from pain in the right hypochondrium for some days, with sickness and fever. On the seventh day of her illness the pain extended over the whole of the abdomen and a feeling of friction was elicited over the liver. A vertical incision made over the right rectus disclosed a greatly distended, tense, purplish-red gall-bladder. This was aspirated and the odour of the fluid was characteristic of the bacillus coli. The gall-bladder was also full of calculi. The patient made an excellent recovery from this operation—one of the most dangerous forms of gall-bladder surgery.

Mr. H. J. STILES exhibited two children after operation for Hirschsprung's Disease. The condition was that of a greatly distended and hypertrophied large intestine. Generally only the descending colon, and especially the pelvic colon, was affected. The history was that of chronic constipation with inter-current attacks of diarrhœa due to slight ulceration. The elder boy, aged eight, was greatly emaciated on admission. The abdomen was enormously distended and the surface veins were prominent. Peristalsis was confined to the large intestine and large waves, from four to five inches in diameter, passed over the abdomen. An artificial anus was made in the left iliac region and the boy had improved greatly. All the fæces passed by the artificial anus but only once a day. The second boy, aged four and a half years, was treated by making an anastomosis between the lower part of the ileum and the pelvic colon, so that the latter would receive only fluid instead of solid fæces. In this case the pelvic colon was dilated to five inches in diameter.

Dr. W. G. AITCHISON ROBERTSON exhibited an Emergency and Antidote Bag which he had made several years ago, and also a much more complete and compact case manufactured by Messrs. Parke, Davis, and Co. The latter contained a large supply of antidotes in the form of compressed drugs as well as a saline infusion apparatus, stomach tube, &c. Dr. Robertson advised every practitioner to have such an emergency case ready as cases of poisoning required immediate treatment and there was usually no time to spare in searching out remedies. He thought that a case containing a few simple remedies should be kept ready at every police station, infirmary, and dispensary.

Dr. A. H. H. SINCLAIR contributed a paper on the Early Diagnosis of Glaucoma by the Screen Test—Bjerrum's Method. In examining the state of indirect vision by this method the ordinary perimeter as well as the special apparatus devised by Professor Bjerrum were employed. With the perimeter the absolute limits of vision were determined and areas of total loss of sight, so-called absolute scotomata, were marked out. This was done with a test subtending a visual angle of not less than half a degree, or with a larger test than this. Bjerrum's apparatus consisted of a large black velvet screen, very small white ivory test-objects, a long slender black rod for carrying the test-objects and a chin-rest for maintaining the position of the patient's head. With this apparatus a most delicate scrutiny of the more central portion of the field of vision was obtained and by this means facts of the highest clinical importance could be disclosed. The more central portions of the field of vision possessed much higher acuteness of vision than did the peripheral parts of the field. Thus one of Bjerrum's small test-objects subtending a visual angle of ten minutes was normally well seen over an area extending to about 40 degrees from the fixation point, but not beyond this area. When a smaller test-object—one subtending a visual angle of two minutes—was used, the normal field contracted so that a radius of about 26 degrees indicated the extent of the normal field for this size of test. The apparatus of Bjerrum had been so well adapted to its purpose that the delicacy of the test was much greater than might at first sight appear. The apparatus was shown and its use demonstrated. The clinical value of the test depended on the fact that slight relative defects occurring in the central portions of the field could be demonstrated by this means. The earliest demonstrable sign or symptom of glaucoma was of this relative kind and could be discovered by the aid of the screen test long before other evidences of the disease appeared. The nature of the glaucoma symptom of Bjerrum, depending as it did on the relationship of the area of most fully preserved vision, and the area of relatively defective vision to the blind spot of Mariotte, was described in full and illustrated by a number of lantern slides of characteristic fields showing the glaucoma symptom. Charts were shown from cases in which full central vision, a full field with the perimeter, and normal ophthalmoscopic appearances were present and in which Bjerrum's symptom was the only evidence of the presence of glaucoma. The value of this test in the early diagnosis of glaucoma was emphasised, while the constancy of the symptom in all forms of glaucoma was shown by charts taken at long intervals of time from the same cases. The differential diagnosis between glaucoma simplex and optic atrophy and the value of the scrutiny afforded by this method in relation to treatment were also referred to.

Mr. WALLACE read a communication entitled "Tumours of the Bladder; why Operative Treatment is so Frequently Unsuccessful in its Remote Curative Result; a Plea for Early Diagnosis." He said that during the last 15 years upwards of 700 cases of operation upon tumours of the bladder had been reported and individual surgeons had reported as many as 100 cases, Nitze having reported as many as 399 cases. The fact that so many had been seen by one surgeon implied that the affection was far from uncommon. Mr. Wallace had himself seen upwards of 50 cases. Hitherto surgeons had generally believed that malignant tumours were more common than benign growths and statistics seemed to corroborate this view. Recurrence of the tumour after removal would therefore be looked for but the statistics of operation as collected by Dr. Watson[1] were much worse than the most pessimistic could have anticipated, the operative mortality in the benign being 17 per cent. and in the malign 27 per cent. In the benign cases which survived rapid recurrence occurred in 20·5 per cent and in the malign 26·8 per cent. It was seen that even in benign tumours operative interference was very often unsuccessful. Over 90 per cent. of single villous papillomata were situated close to either ureteral orifice. Tumours in this position were difficult of access and removal even when no infiltration was present. It was always very difficult, if indeed it were possible, to determine the length of time during which the tumour had existed. Of 174 cases collected by Rafin 80 had existed for from two to six years and 19 for more than six years. It had been urged that a recurrent fimbriated papilloma resembled more closely a malign tumour but this had not been Mr. Wallace's experience. He invariably found that delay in growth followed operation. Early diagnosis was most important and for its attainment recognition of the value of cystoscopy was needed. Mr. Wallace urged the early use of the cystoscope in cases of hæmaturia. There was little or no risk in the procedure, which could usually be carried out without general anæsthesia. He also urged the value of this method of examination in giving a prognosis. The importance of noting the site, attachments of the growth, whether single or multiple, and if possible whether simple or malignant, could not be over-estimated. He had arrived at the following conclusions: (1) Operation should be delayed in cases unfavourable for cure until the symptoms were so severe that life was rendered very unpleasant and the health suffered or when sepsis and septic absorption were present; (2) when hæmaturia was persistent and the patient was losing ground operation arrested bleeding and prolonged life; (3) in such cases suprapubic cystostomy was the best operation; (4) frequency of micturition was got rid of; and (5) the permanent fistula could have an apparatus so fitted that distress from leakage was obviated. Cancroidal tumours infiltrated and invaded the bladder wall and

[1] Annals of Surgery, December, 1905.

tended to rapid ulceration. They were practically inoperable from the time of their recognition. The symptoms often pointed rather to cystitis or to calculus; hæmaturia usually came on after the other symptoms had existed for some time. Bimanually the base of the bladder was felt to be hard and fixed. To attempt the cure of such cases was unjustifiable; palliative operation afforded much relief, however. In papilliomata, this most common form of benign tumour, infiltration of the bladder wall was not present. From its pathological nature and anatomical attachment successful results should be looked for from operation but statistics prove that such are not usually obtained. Two varieties were recognised: (1) fimbriated or villous growths; and (2) warty tumours, usually sessile. The symptoms in both were almost identical. Hæmaturia was almost constantly the first symptom, though sometimes from the blood being intimately mixed with the urine, which was dark in colour, it gave rise to the mistake of diagnosing kidney disease. To avoid error cystoscopic examination should be made. Prostatic bleeding might readily give rise to the idea of vesical tumour. Several cases were narrated as examples of the cure of this disease. In about one half of the cases operated on by Mr. Wallace recurrence had followed and in these the tumours were attached to the bladder wall widely and the actual base of the tumour had been less definitely delimited. The tumours were also almost invariably situated near the urethra. In two cases the tumours were multiple and such showed a great tendency to reproduction. Mr. Wallace believed that if cases of bladder tumour were seen at an earlier period operative interference would be more likely to be successful, much suffering would be prevented, and some lives saved. If the bladder were very freely opened so as to allow of good access and if the attachment of the tumour were seen and not merely felt complete removal might be accomplished. The result to be feared was recurrence from incomplete removal of the tumour. Early diagnosis was to be attained by cystoscopic examination.—Mr. F. M. CAIRD said that the prognosis as regards fimbriated papilloma was no better now than it was 20 years ago. They could never determine its rate of progress. He knew of one case where the disease had lasted for 25 years. The patient ultimately died from hæmorrhage and yet the size of the tumour was only that of the tip of the little finger. Another simple villous tumour recurred several times after removal. It was difficult to understand why the mortality after operation was so high. The risk of sepsis could be avoided by employing a series of drainage bottles as devised by Mr. C. W. Cathcart. The extirpation of the whole bladder did not seem to be such a serious operation as might have been imagined and the ureters could be implanted into the sigmoid flexure.—Mr. A. MILES and the PRESIDENT took part in the discussion.

The following specimens were exhibited:—

Dr. GIBSON and Dr. W. T. RITCHIE: A series of Tracings from Cases of Heart-block.

Mr. CAIRD: Four examples of Intestinal Carcinoma removed from the Pelvic Colon and the Rectum.

Mr. WALLACE: Gall-bladder and Calculi from a case of Septic Cholecystitis.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

Hemiplegia in a Child.—Artificial Respiration.—The Nauheim Treatment.

A MEETING of the Section of Medicine was held on May 18th, Dr. JAMES CRAIG being in the chair.

Dr. R. TRAVERS SMITH read notes on the case of a male child, aged two and a half years, who, on Jan. 1st, 1906, whilst in apparently perfect health, suddenly lost voluntary power in the right arm and leg. A fortnight later great rigidity appeared in the affected arm and leg. The right leg and, to a less extent, the left one were drawn up in the intra-uterine position. On March 1st the child showed signs of tuberculous meningitis and died on the 6th. The necropsy showed the existence of tuberculous meningitis and a tuberculous tumour, of the size of a hen's egg, was found to occupy the region of the corpus striatum and internal capsule. No hæmorrhage was visible in or around the tumour. The case was interesting from the large size and the position of the tumour and from its power of producing sudden hemiplegia in a child who was apparently healthy.

Mr. R. H. WOODS read a paper on Artificial Respiration, in which he compared the relative advantages of Silvester's method with the older one of direct insufflation. He urged that by direct insufflation more air was introduced and, therefore, the stimulating effect on the vascular and respiratory mechanisms, as well as the rapidity of elimination of a drug such as chloroform, was greater, while the impurity of the air insufflated (the original reason for abandoning the method) was negligible.—Professor THOMPSON said that, in his opinion, Mr. Woods's ideas on artificial respiration were an improvement on the methods at present used, his only objection being the repugnance of placing mouth to mouth.

Dr. A. AINSLIE HUDSON read a paper on the Nauheim Treatment. He described the composition of the effervescing baths and detailed his methods of artificially preparing these in Ireland. He then gave an explanation of the physiology of the improvements which followed the baths and the exercises which accompanied them. The immediate effect of the application of the water, rich in saline constituents, was to produce a powerful stimulation of the muscular coats of the superficial blood-vessels, an effect greatly enhanced by the presence of the carbonic acid gas.

Exhibition of Specimens.—Report of the Rotunda Hospital.

A MEETING of the Section of Obstetrics was held on May 25th, Sir ARTHUR V. MACAN being in the chair.

Professor A. J. SMITH exhibited a specimen of Unruptured Tubal Pregnancy removed by operation. He said that the woman was aged 40 years and was the mother of six children, the last of whom was born in August, 1905. In January, February, and March, 1906, her "changes" were up to time and normal. On examination he found in the left broad ligament a mass which he diagnosed as an ovarian cyst and after 48 hours he performed laparotomy. The tube seemed perfectly normal and a little fœtus was found lying in a blood clot in the cavity of the cyst as shown in the specimen.—Mr. E. HASTINGS TWEEDY said that in his opinion the hæmorrhage in this case came from the fœtus. He advocated the removal of tumours at the side of the uterus, for this amongst other reasons that an unruptured tubal pregnancy might easily be mistaken for a less actively harmful tumour.

Dr. HENRY JELLETT exhibited Fibromatous Tumours of both Ovaries, with Carcinomatous Nodules throughout them, associated with Fibromyoma of the Uterus. They had been removed from a patient, aged 58 years, who had been married for 20 years and had had no children. The tumours were removed on May 4th and the patient was now about to leave the hospital apparently well.

Mr. TWEEDY showed a specimen of Intussusception in an infant. The child was born in the Rotunda Hospital and on the second day had hæmorrhage from the bowel. The infant died on the third day. At the necropsy intussusception was discovered. He did not think that such a condition could have occurred after death. Diagnosis was impossible during the life of the child.

Mr. TWEEDY read the Report of the Rotunda Hospital for 1904–05.—Professor SMITH criticised the methods of estimating the standard of morbidity adopted in the British Islands and was delighted that Mr. Tweedy had initiated a movement towards uniformity. Without accepting the proposed method in full he thought that it should be given a fair trial.—Dr. JELLETT said that the report showed better results than in previous years. He thought that its form, however, might be improved, and in this connexion he showed the report of the Clinique Baudelocque in Paris, which report was divided into five distinct headings as follows:—(1) Abortions; (2) Labours; (3) Operations; (4) Morbidity; and (5) Mortality. He suggested that this form of report should be adopted in future. Mr. Tweedy's effort to formulate a proper standard of morbidity deserved the thanks of the Academy.—Sir ARTHUR MACAN said that in his opinion the increase in the number of cases treated in the Rotunda was due to an increase in the number of external cases which he remembered at one time only amounted to 70 per annum. The great treatment for eclampsia was to deliver the woman. As regarded manual or operative methods of emptying the uterus in abortion the former was preferable where possible but where the os was tight it was better to use the curette than to dilate the cervix.—Mr. TWEEDY said that he was more than gratified at the very excellent reception accorded to this year's maternity report and it was all the more gratifying to note the keen manner in which the different portions

of the report were dealt with and criticised. He found himself in accord with practically all that Professor Smith had said. His view as to the eclamptic statistics were that they should, at all events, be made to include the so-called uræmic convulsions, otherwise it was easy to persuade oneself that some of the fatal cases should be ascribed to this condition rather than to eclampsia. He spoke of the great work which Sir Arthur Macan had accomplished during his mastership in improving the aseptic condition of the hospital and this in spite of the greatest structural imperfections. It was a mistake to think that continental authorities were unanimous in the basis which they adopted for estimating morbidity. As a matter of fact, no such unanimity existed and if the maternity hospitals in the British Empire could only be persuaded to adopt the index of morbidity laid down by the British Medical Association he believed that the good which would follow could hardly be exaggerated.

Reviews and Notices of Books.

On Leprosy and Fish Eating: a Statement of Facts and Explanations. By JONATHAN HUTCHINSON. London: Archibald Constable and Co. 1906. Pp. 420. Price 12*s.* 6*d.* net.

THE book before us is a striking example of wonderful energy on the part of a veteran in our ranks, who is everywhere recognised as a master of surgery and its collateral branches, none of which he has touched without adding to its adornment. The fish theory of leprosy, of which Mr. Hutchinson for some years past has been the exponent, is in this work dealt with most exhaustively. We propose to examine his arguments and to see how far they are consonant with our experience.

And first, What is Mr. Hutchinson's theory? It is that the fundamental cause of true leprosy is the eating of fish in a state of commencing decomposition. He accuses, as he clearly states, not fish food in general but only bad fish. The cause of the disease is some ingredient or parasite generated by, or introduced into, fish which has been either not cured at all or cured badly. Dependent on this theory are certain subsidiary propositions—viz., that the malady is not contagious by touch; that segregation is of very little use as regards prevention; that the leper asylums of the Middle Ages were not the real cause of the decline of leprosy; and that in all communities in which cured fish is an article of food the liberal use of salt is by far the most important preventive measure. Any statement made by the author must assuredly merit respect and is worthy of painstaking criticism. Should this theory be correct it ought to be so recognised at once, as Mr. Hutchinson states, "lest many thousands of our fellow-creatures incur the heavy penalties of delay." His interest in the subject began so far back as 1855; in 1863 he wrote in the London Hospital Reports a paper foreshadowing many of his present conclusions that the disease must be in some way connected with dietetic habits. In 1869 he visited Bergen where were the largest fish market and the largest leper home in the world, and he found there that the Norwegian peasants actually preferred their fish in a state of decomposition. In the winter of 1901-02 Mr. Hutchinson made a journey to Cape Colony and Natal and in the following year he undertook his well-known tour in India.

With these preliminary remarks we may now examine more closely the work of the author. Mr. Hutchinson states that in his opinion the disease is only contagious in what he terms a "commensal" manner—that is, that the contagion is conveyed by food handled by lepers. He says that it is more prevalent amongst Roman Catholics than amongst those by whom fish is not eaten by reason of religious ordinances; that the Jains and high-caste Brahmins, who are strict vegetarians, are almost free from leprosy; that people living near the coast are most liable to it; that leprosy did not affect the Hottentot race until smoked fish was introduced amongst them; and that the disease was unknown in inland districts until means of communication were opened with the coast. He sums up his belief in two propositions—viz., first, "that the poison which produces the disease gains access to the body in the form of food;" and secondly, "that the evidence as regards the disease points to fish as being in all probability the vehicle by which the poison of leprosy gains access to the human body." And, in accordance with this theory, he concludes that segregation of lepers will not stay the disease. Now these are very remarkable statements and require careful examination. It is needless to state that the evidence in their favour is most strongly and lucidly put forth by Mr. Hutchinson; he instances various places of such different characteristics that he concludes that climate, air, soil, weather, and so on, can have nothing to do with the cause of the disease; other localities are mentioned where the disease has wholly ceased to prevail, although no material change of climate, and so on, has taken place. Having thus cleared the ground and shown leprosy to be quite a special disease, in all countries and races the same, the conclusion is come to that it must be due to some special cause which must be of almost universal prevalence, and that it is highly probable that the cause is one capable of almost spontaneous generation since the disease has originated apparently *de novo* in many and very distant places. The cause also is one that may easily cease to exist in many of its native homes, since it has died out in countless districts. These facts thus point to the conclusion that the efficient cause of leprosy must be some article of food.

As supporting the theory that some article of food is the cause, the author points out that the world-wide distribution of leprosy proves that it is not solely dependent upon contagion but is capable of independent origination, and further, that the irregularity of its distribution makes it certain that it is produced by some article of food which is consumed in some countries and not used in others. This article is then concluded not to be among the vegetable, milk, or flesh foods, and hence it is reasoned that fish—bad fish—is the incriminated agent. Next it is shown that there is strong evidence in support of the statement that a very large number of lepers are found in all countries who have neither inherited the taint nor been in any way exposed to contagion. These cases in their turn are held strongly to support the creed that the disease in question is induced by food.

Mr. Hutchinson next proceeds to deal with the conditions under which the prevalence of leprosy has declined in certain countries and under which in other countries it holds its ground. As regards the former, taking the case of New Zealand as an example, the Maoris at the time of the arrival of the Europeans had many cases of the disease. The disease commenced then to decline and for the last half century it has practically been non existent. This decline has been co-existent with a change of diet in the Maori race, for whereas formerly they lived on fish and fern roots now they live on beef, mutton, potatoes, and wheaten bread. No leper house was ever formed, nor were any attempts at isolation made. And with regard to the latter conditions he proceeds to consider the attending environment in Norway, Iceland, Spain, and Crete. With respect to Norway he shows that the disease has been strictly limited in its prevalence to the labouring part of the community—to the fishermen, the boatmen, and peasants who lead extremely hard lives. Cereals can be cultivated only with difficulty and the products of the sea and milk constitute the staple articles of their food. The fact that the disease prevails also amongst the peasants in the mountain vales he holds to be explained by the peasants

having free access to fish food during its conveyance inland from the coast. The same explanation holds good for Iceland. The author next discusses the view that leprosy does not commonly spread by contagion, and here he states that he means by this that there is no danger from consorting with lepers provided care be taken not to receive food from their hands. The disease is not conveyed by mere touch, by the breath, or by the clothes worn by a leper. These statements he fortifies by careful, well-reasoned arguments.

Such are a few of the arguments with which Mr. Hutchinson upholds his theory. But *tot homines, quot sententiæ*. It must be confessed that this interesting theory does not meet with the approval of a large number of physicians who have had personal knowledge of the disease. Let us note some of the objections to it. And first as to bad fish being the essential factor. Should any cases be shown to exist where bad fish has not been the essential factor it must follow that the theory falls to the ground. Are there such cases? We have seen that the author explains the decline of leprosy amongst the Maoris to the fact that they have changed their diet from a fish diet to one of meat, potatoes, and bread. Now Dr. Francis Day whilst travelling in Burmah never saw a case of leprosy amongst the indigenous population, although the Burmese like fish, and especially the odoriferous "nga" fish. Dr. Vincent Richards, a man of acknowledged authority on tropical subjects, shows by statistics not only that the consumption of fish has nothing to do with leprosy as regards its causation but he also states that it would be quite as logical to state that this factor is a prophylactic, the disease being less met with in those districts where there is the greater consumption of fish; and, lastly, Dr. Crane, the Government physician in Hawaii, has written that from time immemorial fish, especially raw fish, had been the staple food there until the year 1860. Until that year there were no lepers in Hawaii nor was there any history of the disease. At this date it appeared and in a few years after its introduction it had decimated the community, yet at this time canned foods, fresh meat, and vegetables had been very largely substituted for fish in the diet and the use of fish, especially raw fish, had enormously decreased. The history of Hawaii, in fact, demonstrates this fact, "All fish no leprosy," "Little fish no leprosy," and the argument is as valid as that used in the contrary sense by the author concerning the Maoris. Again, experience in India demonstrates the fact to the physicians in that country that many lepers declare not only that they have never eaten fish but that they actually do not know what it is. Caste ordinances, again, militate against the use of fish in many who have become lepers.

Let us consider, also, the question of contagion. How can the fish theory explain the cases shown by Dr. Benson at the Dublin Medical Society in 1872 and 1877. In 1872 a leper was shown by him who had acquired the disease in the West Indies. In 1877 Dr. Benson showed a second case in the person of the brother of the first, who had never been out of the United Kingdom. This man had slept in the same bed with his brother and occasionally worn his clothes. Consider, again, the case mentioned by Professor W. Osler. Here seven people were in turn affected by what to most minds must seem to have been contagion. And in connexion with the question of contagion the remark of von Duhring is peculiarly apposite—namely, that all negative evidence brought forward as to its non-communicability is valueless in the face of one positive fact. Lastly, as regards the alleged failure of segregation to prevent the disease, few of those who have had personal experience will agree with the author. To mention one instance only, in Madagascar the former limited amount of leprosy has rapidly increased since segregation was abandoned. It is thus seen that there are many objections to Mr. Hutchinson's theory which must be overcome before it can be finally accepted as the true explanation of the disease.

Chirurgie Oto-Rhino-Laryngologique: Oreille, Nez, Sinus de la Face, Pharynx, Larynx, et Trachée. (*Oto-Rhino-Laryngological Surgery: Ear, Nose, Sinuses, Pharynx, Larynx, and Trachea.*) By GEORGES LAURENS, late Assistant of Oto-Rhino-Laryngology of the Hospitals of Paris. With 470 figures in the text. Paris: G. Steinheil. 1906. Price 30 francs.

THE series of which the above work is one is composed of separate monographs, each by one individual, but constituting in its entirety a genuine encyclopædia (the "Traité de Médecine Opératoire et de Thérapeutique Chirurgicale," edited by Professor Berger and Professor Hartmann). The large size of the book might create at first sight the impression that it must contain a good deal of unnecessary material. This, however, on closer acquaintance with the contents is found not to be the case. It is true that Dr. Laurens enters into the most minute details: nothing is too small, no detail too insignificant, to be considered by him. But this is not a work intended entirely for the use of experts; it is one from which the student can learn and the practitioner can perfect himself in his details.

The work is divided into six parts—viz., the surgery of the ear, the nose, the sinuses, the pharynx, the larynx, and the trachea. In each section the methods of examination of each part and its difficulties are first considered. The general therapeutics are next dealt with and then follow observations on the operations. In the surgical section on the ear the first chapter deals with the methods of operation on the different parts of the external ear; and the second with operations on the external meatus, including the extraction of foreign bodies. Section II. describes minor operations on the drum, not excluding the introduction of artificial tympana. The details of treatment of suppurative diseases of the ear receive attention in a separate section. On the surgery of the labyrinth there is a short but interesting chapter. Under the heading of operations necessitated by suppurative disease we find ourselves confronted with an enormous mass of material, all of which is interesting and useful. Dr. Laurens seems to us to intimate that it is usual to employ a blood aspirator in these cases. This, we think, is rarely required and can hardly be considered at all a necessary part of the aural surgeon's armamentarium. The various methods of dealing with the external meatus and of lining the operation cavity with skin, accidents during or following operation, and causes of delayed healing are discussed with great clearness. We are pleased to note that in dealing with the lateral sinus eight pages are devoted to the surgery of the jugular bulb, a knowledge of which Dr. Laurens most correctly considers essential to the aural surgeon. Intracranial lesions, lumbar puncture, and operations on the facial nerve in its bony sheath without the skull, each receive their due share of attention. In an equally careful, methodical, clear and exhaustive method the nose and the sinuses are considered in 250 pages, 50 of which are devoted to the nose and the pharynx. The larynx and the trachea occupy the remainder of the work.

As we observed above, the book, though ponderous, is not too large for the subject and it is one of which a translation into English would be welcome. The illustrations are semi-diagrammatic, though they frequently possess great artistic merit. The type is clear, the paper is excellent, and it is an extremely pleasant book to read. It is full of valuable information and is one which we can cordially recommend to the earnest attention of teachers and of students alike.

LIBRARY TABLE.

Essentials of Genito-Urinary and Venereal Diseases: Arranged in the Form of Questions and Answers prepared

especially for Students of Medicine. By STARLING S. WILCOX, M.D., Professor of Genito-Urinary Diseases and Syphilology, Starling Medical College, Columbus, Ohio. Saunders' Question-Compends. No. 13. Illustrated. London and Philadelphia: W. B. Saunders Company. 1906. Pp. 313. Price 4*s.* net.—The demand for the former numbers of Saunders' Question-Compends is the best evidence of the value of these self-helps to students and medical men. In this little book essential facts are presented in a terse manner and a series of categorical questions are answered dogmatically. The book cannot fail to be of value to those for whom it is intended. Dr. Wilcox teaches that mercurials should not be given as soon as a chancre is diagnosed because the early administration is likely to postpone or to prevent the orderly evolution of secondary symptoms. He argues that as a result of this postponement or prevention most patients refuse treatment or fail to continue it long enough to cure their syphilis. In his opinion waiting for the eruption to develop does not jeopardise ultimate recovery. In writing of the treatment of hydrocele of the cord the author recommends multiple puncture and the injection of iodine to produce inflammatory adhesions of the walls and he says that this will cure the ordinary case; he does not mention the simpler and less painful proceeding of removal of the front wall of the sac. The teaching is quite sound and the book is a useful one written in language simple and explicit. It is a good introduction to the subjects considered. The volume is well and sufficiently illustrated.

Post-Operative Treatment. By NATHAN CLARK MORSE, A.B., M.D., Surgeon-in-Chief to "Emergency Hospital," Eldora, Iowa; District Surgeon, Chicago and North-Western and Iowa Central Railways, &c. Containing 5 plates and 155 other illustrations. London: Rebman, Limited. 1905. Pp. 468. Price 17*s.* 6*d.* net.—The treatment of a surgical patient does not end with the completion of the operation and we welcome this work as an exposition of a subject which has not hitherto received due recognition in medical literature. The exact scope of the work may be gathered from the somewhat elaborate title page, where it is stated that the book is "an epitome of the general management of post-operative care and treatment of surgical cases as practised by prominent American and European surgeons, together with suggestions concerning the technique of certain operations with a view to securing better post-operative results." In the preface the author claims that his book is the first work devoted exclusively to the subject of the post-operative care of patients; he does not appear to be acquainted with Mr. J. P. Lockhart Mummery's work on the After-Treatment of Operations, of which we were able to speak with approval. The author by no means confines the text to his own opinions or methods but quotes freely from many authorities, both in this country and in the United States, and thus the reader has facilities for comparing different practices. The author includes several subjects which can hardly be called "post-operative." For instance, the title of the first chapter is "Preparation of the Patient for Surgical Operation." We think the book should prove of service, especially to those who have recently become qualified. We agree with the author that it is desirable to put the metric equivalents of avoirdupois weights but on p. 267 124 grammes are given as equal to four ounces; the number should be 114 grammes.

Handbook of Surgery. By GEORGE BURNSIDE BUCHANAN, B.A. Cantab., M.B., C.M., F.F.P.S. Glasg., Assistant Surgeon to the Western Infirmary, Glasgow; Assistant Surgeon to the Glasgow Cancer Hospital. Edinburgh: John Currie. 1906. Pp. 547. Price 9*s.* net.—This little work is one of the best *résumés* of surgery which we have seen. It is not possible to include within the compass of a volume of this size a full account of the science and art of surgery but we find here a clear, concise, and correct account of the subject and one which may easily be of service to the average medical student in refreshing the memory immediately before an examination, though we would not advise it as the sole treatise on surgery for a student. In such a work we do not look for originality but we have found one useful suggestion—namely, that for boys with ectopia vesicæ a kilt is the most suitable costume.

Essentials of Gynæcology arranged in the Form of Questions and Answers. By EDWIN B. CRAGIN, M.D. Sixth edition, thoroughly revised by FRANK S. MATHEWS, M.D. With 57 illustrations. London: Henry Kimpton. 1906. Pp. 215.—It is surprising to find a work of this character running into six editions. No doubt there is a demand for this class of book amongst American students and if employed in a proper manner, that is to say, as an adjunct to the reading of more extensive manuals and in conjunction with clinical study, it may prove useful to the student in refreshing his memory and in helping him to systematise his knowledge for the purposes of examination, and that we gather is what the authors intend it to be used for. Naturally in such a work there must be many statements with which not all gynæcologists would agree but the result of our reading of the book is to show that on the whole it is a good and trustworthy guide, so far as it goes, to the current American teaching in gynæcology.

Essentials of Obstetrics arranged in the Form of Questions and Answers. By WILLIAM EASTERLY ASHTON, M.D. Sixth edition, revised. With 75 illustrations. London: Henry Kimpton. 1905. Pp. 256. Price 4*s.* net.—This edition appears to have been revised by Dr. Dorland, although no mention of this is to be found on the title page. The editor states in his preface that the book is now up to date. On p. 31 we find the erroneous statement that the current produced by the cilia of the uterine epithelium is towards the tubes; this has, of course, been conclusively disproved by Hofmeier and Mandl. No mention is to be found of the new views as to the imbedding of the ovum in the mucous membrane of the uterus nor is there any mention in the section on tubal pregnancy of the occurrence of tubal abortion or of the formation of a peritubal hæmatocele. The use of Champetier de Ribes's bag in the treatment of placenta prævia is not described and in the section on the treatment of accidental hæmorrhage we are told that "whether the hæmorrhage be slight or grave immediate delivery must be accomplished by forceps or version." In view of such omissions and these statements we cannot agree with the remark of the editor that in their present form the "essentials" represent the up-to-date views of the obstetric masters.

Handbook of Obstetric Nursing. By FRANCIS W. N. HAULTAIN, M.D. Edin., F.R.C.P. Edin., and JAMES HAIG FERGUSON, M.D. Edin., F.R.C.P. Edin., M.R.C.S. Eng. Fifth edition, revised and enlarged. With frontispiece and 37 engravings. Pp. 267. London and Edinburgh: Young J. Pentland. 1906. Price 5*s.*—The excellence of this handbook for nurses is attested by the fact that the present is the fifth edition. The authors have throughout kept in mind the fact that such nurses often have had no general training and therefore they have not loaded the book with unnecessary scientific details. Special stress has been laid upon the importance of antiseptics and this is an admirable feature of the work. We think, however, that it is a pity in describing the best method of disinfecting the hands after they have been exposed to the danger of septic infection that no mention is made of the use of rectified spirit. The permanganate and oxalic method is described but it is often much easier and cheaper for the nurse to obtain some rectified spirit and she is much more likely to meet with, at

any rate, methylated spirit in any house than the saturated solutions of permanganate of potassium and of oxalic acid which are required in the method described. The book would be more generally useful if the authors did not make use of such a term as Henry's solution which the ordinary nurse does not understand, and if they had printed in the appendix the rules of the Central Midwives Board instead of the memorandum of the British Medical Association of the regulations proposed for adoption by the Obstetric Nurses Board, whatever body this may be intended to mean.

Bantu Folk Lore. By MATTHEW L. HEWAT, M.D. Capetown: T. Maskew Miller. Pp. 112. Price 7*s.* 6*d.*—This little book commences with a chapter on the Bantu race communicated by Mr. W. Hammond Tooke. The Bantu race extends "over all Central and South Africa, south of a line drawn roughly from the Kamerun to the Pokomo river, but excluding the south-west corner—Great Namaqua Land and Western Cape Colony—which from time immemorial has been occupied by Hottentots." Dr. Hewat has collected some very interesting information about Kaffir folk lore, mostly in its medical aspect. Apparently the native medicine men possess no mean knowledge of the healing properties of various plants, while their surgery, though crude in many instances, has sound ideas at bottom. For instance, the treatment of a burn is to scrub away the charred portions of the skin and other tissues until the wound is clean. The raw surface is then dressed with boiled leaves taken from certain plants and possibly some amount of sepsis is thereby prevented.

Les Empoisonneuses: Étude Psychologique et Médico-Légale. (*Female Poisoners: A Psychological and Medico-Legal Study.*) Par le Dr. RENÉ CHARPENTIER. Paris: G. Steinheil. 1906. Price 6 francs. Pp. 232.—Dr. Charpentier has given us a most interesting book. The crime with which his work is concerned has, he says, diminished progressively since 1860. It is more common in the country than in the town and among uneducated persons than among educated. He is, we presume, speaking of France but we fancy that the statements hold good for all civilised countries. The chief cause of the diminution is, he thinks, the remarkable advance in the science of toxicology which has occurred during the last 40 or 50 years, together with the fact that education is more widespread than formerly. But poison is above all the weapon of the female murderer and has been so from ancient times. The sum of Dr. Charpentier's book is to prove that "a historical and medico-legal study of female poisoners shows that a certain number of these criminals are hysterical degenerates and that there exists a definite relation between the mental condition of these unbalanced women (*déséquilibrées*) and the psychology of the crime of poisoning. Poison is the weapon of election of the hysterical woman who kills." This view, we think, is quite justifiable in so far as regards Western civilised nations but it fails when we consider Oriental nations. In India, for example, poison is the favourite and recognised method of "removing" anyone who may stand in the way of the "remover." It is, moreover, a much used method of killing the cattle of an enemy. Dr. Charpentier thinks that hysterical degenerates who employ poison should not be condemned to death or to lifelong imprisonment but should be interned in an "*asile de sûreté*" which should be an establishment intermediate between the prison and the lunatic asylum. After such persons had been interned for a certain time and a careful study had been made of their cases, it might be possible in some instances to let them out for a longer or shorter term, on the supposition that at any time when it became necessary they should be re-interned. The question is one which it is extremely difficult to decide but Dr. Charpentier's book is an interesting and valuable contribution to the literature at present existing on the matter.

New Inventions.

A NEW IRRIGATING APPARATUS.

THE accompanying illustration shows an instrument I have used for some years, chiefly for urinary work. It is, however, useful for many purposes, such as for syringing the ear. I use it largely for the irrigation treatment of urethritis and by its use I claim this useful aid is carried out in a more scientific way than was hitherto possible. Not only is the stream from the nozzle C (which allows of various attachments) continuous when the ball A is used, but there is a pressure gauge B which is the distinct novelty

of the instrument. By it we can register the pressure we use to overcome the resistance in the urethra—chiefly the compressor muscle—which I find to vary much not only in different persons but in the same person. Hence by the use of this instrument the irrigation treatment is robbed of its chief drawbacks, abruptness of action and want of registration of force, which want I often knew to lead to disagreeable results. The fluid ascends through the tube D. I often use the instrument for filling the bladder with or without a catheter. The instrument is now made by Messrs. Arnold and Sons.

Finsbury-pavement. JAMES MACMUNN.

LEICESTER BOROUGH ASYLUM.—The thirty-sixth annual report of the visiting committee of the Leicester borough lunatic asylum shows that on March 31st last there were 813 patients in the institution—viz., 341 men and 472 women. During the year 57 patients were discharged as recovered, 45 were committed to the care of friends or removed to other asylums, and 79 died. Dr. J. E. M. Finch, the medical superintendent, in his report to the committee, states that 101 women and 78 men were admitted to the asylum during the year 1905. The rate of mortality, estimated upon the average number resident, was 9·1 males and 8·5 females. The death-rate, although somewhat higher than in the previous year, was still below the average in public asylums. The chief causes of death were cerebral lesions 22 (including 14 from general paralysis), pulmonary tuberculosis seven, and senile decay 11. The total number of epileptic patients under treatment during the year was 146 and 11,060 fits were recorded. The chief causes of insanity predisposing or exciting among those admitted, excluding transfers, were hereditary tendency 40, intemperance in drink 28, domestic trouble and adverse circumstances 19, congenital defect 10, and old age 10. The number of admissions was four less than in the previous year and statistics for the past six years showed that there had been no increase of occurring insanity in Leicester during that period.

THE LANCET.

LONDON: SATURDAY, JUNE 16, 1906.

The Illegal Practice of Medicine in France.

OF late years the relations between this country and France have been established upon the firm footing of friendliness, a development of that respect which must surely arise between persons who for some 500 years have been constantly fighting one another in every part of the world. The two nations have now found out that many institutions exist in the country of each which are worthy of imitation by the other. And to pass from the general to the particular, a striking instance of how our neighbours do better in certain circumstances than we ourselves is given by our report in another column of the proceedings of the recent Congress for the Repression of the Illegal Practice of Medicine held in Paris at the end of last month. It must be premised that in this country there is no such thing as what is known in France as *exercise illégale*. In this country a duly qualified man may be prosecuted and fined for malpraxis, but any non-qualified person, however ignorant, may prescribe, may attempt to treat diseases, or even to perform operations, supposing that he can find anyone foolish enough to pose as a patient, with the proviso that the non-qualified practitioner does not use any title implying that he is registered under the Medical Acts. The Paris Congress, it will be seen, was no mere meeting of the members of the medical profession, for it was attended by two Cabinet Ministers and by the Prefect of the Paris police. There are twin evils which have afflicted this world from the earliest times and probably will always continue to do so—they are quackery and prostitution. In pagan times prostitution was a source of revenue to the existing "church," and even in mediæval times the revenues of certain sees were enhanced by the profits of the "stews," notably that of Winchester, the Bishop of which see farmed the "stews" in Southwark. Nowadays to make money out of prostitution is rightly considered to be the lowest form of infamy. But the making of money out of quackery has become a great source of revenue to various magazines, to many newspapers, and in a small degree to the Government, for the Government stamp on patent medicines is considered by many who buy these preparations to be a Government guarantee. We do not desire the whole world to be for ever throwing stones at the Magdalen, nor do we desire to ring medicine around with an absolute barrier of professional privilege, but we do look forward to the time when traffic with the rampant charlatan will be regarded as an infamy—an infamy comparable to the maintenance of a brothel.

Quackery will probably never be forbidden as such by law in these islands. While leaders of society aid and abet the remarkable heresy known as "Christian Science"; while Members of Parliament maintain that all deaths are due primarily or secondarily to vaccination; while beneficed clergymen of the Church of England issue leaflets saying that three doses of three drops of carbolic acid will cure any fever and members of religious houses belonging to the Roman Catholic communion sell wonderful salves, it is too much to hope that any interdictory legislation will be passed. But there is one way in which the evils of quackery might be greatly minimised and before very long practically abolished. It is one which has been urged over and over again and which has been in certain directions supported by ourselves. At present the quack does nothing illegal in practising. The Government stamps his nostrums and incidentally abets his procedure. Newspapers and magazines from the highest to the lowest flaunt his advertisements before their readers' eyes and draw a large income by doing so. If the law cannot prevent these things—and we are sure that in the present state of public ignorance it cannot—the profits of traffic in quackery might be so cut down that the game would not be worth practising. If no unqualified person pretending to cure diseases were allowed to practise unless he paid for a licence many ardent charlatans would pause in their careers. If the licence were renewable yearly and cost a large sum a real check would undoubtedly be put upon the evil. Such licence would be no more a guarantee of the quack's honesty or ability than is a public-house licence of the purity of the liquor sold therein or a licence to sell tobacco of the quality of the goods sold. It has been suggested that the income drawn by the proprietors of any magazine or newspaper for the advertisement of any quack remedy of any kind should be heavily taxed or should be impounded and paid over to a fund to be distributed among the hospitals of the United Kingdom. If this were done, in a few years' time the number of quacks would have greatly diminished while their advertisements would be practically *nil*, but those who suggest the scheme are unaware of its difficulties, of the interference with private discretion that it would involve, and of the intolerable surveillance that it would imply. For a system of licences there is much to be said, but the cause of reform is not really assisted by proposing a police inspection of advertisements.

We have said that the conference recently held in Paris deserves imitation on this side of the Channel and we should much like to see a similar meeting held in London. Legislation is not all that is wanted; people must be educated to see that they, when they apply to quacks, waste their money and, what is still more important, that health which is so precious to all of us. It is true that we of the medical profession object to quackery because for one reason it deprives us of a means of livelihood for which we spent many long and arduous years to fit ourselves, but chiefly we object because we know so well what incomparable harm men and women do to their bodies by allowing them to be exploited by quacks. We do not agree with all that was put forward at the Paris Congress but in the main the speakers asked for nothing which a sensible public would not ask for if supplied with the proper information. The ventilation and discussion of such questions are of the greatest use both to the public and to the medical profession. The medical profession has nothing to fear from a

more enlightened public; the better the public becomes acquainted not only with the teachings of abstract science but with the professional difficulties of medical men the more certain are those who follow that profession to find powerful sympathisers.

The Treatment of Ringworm.

THE visit of Dr. SABOURAUD to England and his address to the Dermatological Society of Great Britain and Ireland arouse fresh interest in the rapid development which has taken place within the last few years in the treatment of ringworm by the Roentgen rays. Ringworm is a very ancient disease; it is found among the Arabs and among uncivilised peoples. It is to-day very widespread among the poorer and less cleanly classes but the fact of its comparative rarity among the better classes points to its being a preventable disease. The cure of ringworm has always presented the greatest difficulty because the root of the hair is inaccessible to external antiseptics and because no remedy could be found which would penetrate to the hair papilla without causing at the same time its destruction and therefore permanent baldness. The average duration of the disease extends from two to four years, during all which time the child is deprived of school teaching at a particularly receptive age. In 1896 Dr. SABOURAUD sought to find an agent capable of suspending for a time the function of the hair papilla. He made experimental inoculations of a microbic toxin but the resulting alopecia usually occurred at a distance from the site of inoculation. An ointment of acetate of thallium caused a general alopecia, followed by healthy re-growth of hair, but in some cases grave constitutional symptoms arose which necessitated the abandonment of the method. Cataphoresis with various substances is still on its trial and has its advocates. Roentgen rays were employed for depilation for several years by many workers with successful results but in all recorded cases repeated exposures of the same area were required and the danger of permanent baldness and x-ray dermatitis was too great for general adoption of the method.

Dr. SABOURAUD turned his attention to the x rays as a means of suspension of the function without destruction of the hair papilla at a single sitting. At the outset of his researches he was met with the varying length of time of exposure said to be necessary to insure depilation. FREUND wrote in 1904 that an exposure of from 11 to 20 hours was necessary. The number of sittings needed for depilation of each patch varied in the different records from five to 20 and even more. Some observers advised long, and others short, exposures; some counselled the use of hard, and others of soft, tubes. The distance of the tube from the scalp and the frequency of exposures necessary also varied widely; and to add to the complexity of the subject many workers found that in spite of every care cases of radiodermatitis and permanent alopecia supervened. It appeared to Dr. SABOURAUD that the essential factor in the situation was the discovery of a method by which the quantity of x rays emitted from the Crookes tube could be easily and accurately measured, so that for each patch treated one single application of x rays might be sufficient for a cure. As previously explained in our columns,[1] Dr. SABOURAUD and his assistant, Dr. NOIRÉ, measure the quantity of x rays emitted by the alteration in colour effected by the action of the rays upon a disc of platino-cyanide of barium. When the disc, exposed at a certain precise distance from the Crookes tube, acquires "Teinte B," a fawn tint which is compared with the pattern supplied with each packet sold, the exposure must be at once stopped. Since the introduction of these discs, or pastilles, as they are usually termed, there have been from time to time complaints from physicians who have not had the expected success after their use. Dr. SABOURAUD now points out in the address to which we have referred that such failures may be due to several causes; for instance, the pastille may have been placed in the wrong position or may have been exposed to daylight while the x rays were being employed, the head of the patient may have been inaccurately placed, the Crookes tube may have been too large, or the pastilles may have been wrongly made. The pastille must be situated precisely seven and a half centimetres from the antikathode and the patch to be treated must be precisely 15 centimetres from the centre of the antikathode. If the pastille is placed further off it is obvious that a radiodermatitis will be caused if the exposure is not stopped until the pastille acquires the correct tint. On the other hand, if the pastille is placed nearer to the antikathode than the seven and a half centimetres Tint B will be acquired too soon and the hair will not completely fall out. Mathematical precision in arranging the centring of the rays and the distance of both pastille and scalp is indispensable for success. Some experience is required exactly to gauge the tint with the pattern and we believe that failures are possibly due to over-caution as well as to recklessness and perhaps defective colour vision on the part of the physician. Dr. SABOURAUD points out how deputy nurses make mistakes and how experienced nurses become so expert that they can gauge the tint even when the pastille is lying in the path of the active rays—an ability to which he himself cannot yet lay claim. Certain German makers have recently sold pastilles of platino-cyanide of barium but instead of making up the emulsion in collodion with acetate of starch they have used gum arabic and varnished the pastille surface; such pastilles cannot be guaranteed and failures due to their use have been reported. Lastly, Dr. SABOURAUD emphasises the importance of employing a Crookes tube the diameter of which does not exceed eight centimetres and the glass of which is thin.

We have briefly mentioned the sources of error but the chief refutation of adverse criticism of the pastille is the experience of Dr. SABOURAUD at the École Lailler. In 1500 cases treated with 7000 exposures since 1904 not a single case of dermatitis has occurred. The financial results in the city of Paris have been sufficiently remarkable. The cases admitted to hospital have diminished in number and their detention has decreased from 27 months, the average time required for cure by the older methods, to six weeks. The cost of a patient suffering from ringworm in hospital to the Administration de l'Assistance Publique is 2·80 francs per day. With the new method of treatment the accommodation for such cases is found to be larger than necessary.

[1] THE LANCET, Feb. 18th, 1905, p. 414.

In January, 1904, Dr. SABOURAUD was able to give up to the Assistance Publique 150 beds and as a bed represents a capital of 10,000 francs 1,500,000 francs were saved. In another six months Dr. SABOURAUD expects to be able to hand over another 100 beds. Up to 1903 children affected with ringworm lived at the École Lailler for an average of two years and the average of cures per annum was 110; in 1905 the number of cures was 504. Each cure used to cost 2000 francs; now it costs an average of 260 francs. Dr. SABOURAUD made the following summary at the conclusion of his address: "With the application of x rays for ringworm the Assistance Publique will have recovered at the end of this year a capital of 2,500,000 francs; and, further, it makes now, and will continue to make, a saving certainly exceeding 300,000 francs per annum, a sum which will increase from year to year."

Japanese Medicine.

MANY factors have recently drawn attention to the intellectual progress of the Japanese. For their progress relating to medical matters it is fitting that in these columns we should not withhold that praise which is so richly deserved. Our readers have had an opportunity of studying at leisure the presentation of one aspect of Japanese medicine in the interesting lectures recently delivered at St. Thomas's Hospital by Baron TAKAKI, F.R.C.S., who selected as his subject the preservation of health amongst the *personnel* of the Japanese navy and army.[1] Baron TAKAKI was himself a distinguished student at St. Thomas's Hospital, and in view of the success that has attended the reforms which he has introduced in his national navy and army it is natural that the staff of that hospital should feel a sense of gratification in inviting him to review these results within the walls where he had studied for an English qualification. Before coming to this country in 1875 he had seen several hundreds of cases of beri-beri at the Naval Hospital in Japan and was therefore fully acquainted with the danger that it was likely to present in the event of any serious and prolonged war. Beri-beri occurs only among rice-eating peoples, and its prevalence and importance may be realised from the fact that formerly it constituted three-fourths of all illnesses in the Japanese navy. One attack afforded no protection, the same men were often affected three or four times a year. The control of this disease was the problem which Baron TAKAKI set about solving when he was appointed Vice-Director of the Naval Medical Bureau, and our readers will have noted the care with which he accumulated the data from which he was able to prove that the disease originated in an excess of carbohydrates and a deficiency of proteids in the dietary. Although the lectures covered a wide field of interest, Baron TAKAKI necessarily spoke most fully of the subject of beri-beri, which is most peculiarly his own, and the triumphant demonstration of the wisdom of the reforms which he introduced is shown by the practical elimination of beri-beri from the ranks of the navy and its enormous diminution in the army, where his recommendations could only in part be carried out. We read that formerly "the food supplied to the army and navy was regulated by a monetary system, without any regard for quality or quantity;" and Baron TAKAKI is to be congratulated upon having shown that the truest economy lies in the prevention of disease, even though the initial expense may be somewhat greater.

It is unnecessary for us to follow the steps by which Baron TAKAKI arrived at his conclusions, or to enter into details as to the composition of the rations supplied to the Japanese soldier before and after the time when Baron TAKAKI'S recommendations had been accepted. These details are to be found in the lectures, while they receive confirmation from an independent source in the pages of a book which has been written by a late surgeon-major of the United States army,[2] who drew upon materials collected during the recent war as well as upon official statistics with which he was courteously supplied. Surgeon-Major LOUIS L. SEAMAN writes with the authority of one who has already seen active service, and his narrative is not weakened by his obviously sincere conviction that other countries might with advantage copy the army medical organisation of the Japanese. He has shown that the precautions taken by Japan have been sufficient to reverse the trustworthy statistics of war which had been accumulated during the past 200 years. While all medical men have been familiar with the frequent assertions that Japan has assimilated and improved upon European knowledge, it will probably cause some surprise to find that whereas the former estimate allowed for at least four men to perish from disease to every one from bullets in the recent Russo-Japanese War the proportions were precisely reversed. This alteration is attributed to the general precautionary measures adopted. Diseases which have hitherto occupied prominent positions in the statistical reports almost dropped out of consideration during the Russo-Japanese war. Surgeon-Major SEAMAN speaks of "the conquest of the silent foe," and the conquest, in his opinion, has been effected far more by precautionary and hygienic measures than by any medical or surgical skill in treatment. Due credit is assigned to operative skill, to medical treatment, and to the admirable provision of hospitals on the lines of communication, but it is abundantly evident that these alone would not have been so successful had they not been preceded by an almost incredible amount of forethought. The careful examination of the water-supply, the instruction in the use of "first dressings," the destruction of flies in the hospitals, and the provision of nets by which they could be excluded, all betoken an enlightened application of means to an end. Beyond this, however, Surgeon-Major SEAMAN attributes a large part of the success to the harmonious working of all concerned in securing the general welfare of the army. He states definitely that, although some of the most eminent Japanese medical men were called on to help in army hospitals at home, they invariably served as assistants to the men in charge. These men frequently had been their former pupils in the University, but the limits of discipline were never transcended.

In the medical records of the late war, as detailed in this book and in the lectures of Baron TAKAKI, is to be found ample justification for the compliment paid to the Empire of Japan by the General Medical Council in giving

[1] THE LANCET, May 19th and 26th and June 2nd, 1906.

[2] The Real Triumph of Japan, by Louis L. Seaman. London: Sidney Appleton, 1906.

courteous consideration to the representations addressed to the Foreign Office from the Japanese Legation. It had been recognised that Japanese medical graduates under existing conditions would be precluded from practising amongst their compatriots in some British Crown colonies in the Far East, and the General Medical Council was desired by the Japanese Government to remedy this anomaly. In his presidential address Dr. DONALD MACALISTER referred to the prolonged course of preparatory and professional study and examinations required for the medical degrees of the Imperial University of Tokio and added that the surgeons and sanitary officers of the Japanese forces had proved themselves capable of teaching many wholesome practical lessons to the nations of the West. A memorandum on the subject had been prepared for the Council by the President on the conditions required for medical qualification in the Japanese Empire and this appeared as an appendix to the minutes of the Council. It deals purely with the conditions for university graduation in Japan and demonstrates that they are amply sufficient to guarantee the efficiency of its medical graduates. On these grounds, therefore, the Council readily acceded to the request to grant recognition of the degrees of the University of Tokio. This recognition is particularly honourable to both countries because of its immediate origin. The discovery of the causation of beri-beri by Baron TAKAKI, and the success of the measures that he introduced, might possibly be attributed to the education which he received in England. No such explanation can attach to the general results of the medical administration during the war. One of the lessons learnt by Surgeon-Major SEAMAN was that a medical man at the front, like a sentinel on duty, could prevent the entrance of danger; he was thereby worth 20 men stationed at the rear to treat sickness when it had obtained a foothold, wherefore Surgeon-Major SEAMAN places the medical preparations for war as equal, if not superior, to those undertaken by the non-medical military authorities. That this lesson should have been learnt from observation is sufficient evidence of the practical nature of the medical education of the Japanese.

Annotations.

"Ne quid nimis."

THE ACCURACY OF THE MEDICAL REGISTER.

THE official roll of the medical profession can only be kept correctly by the regular coöperation of its members. It is to the interest of the profession that the roll should be accurate. Some of our correspondents when they detect any errors use a very hurt tone towards the authorities of the General Medical Council, forgetting that for the most part mistakes in the roll are due to the slackness of the profession at large. Changes of address and alterations in style or title are not communicated to the Registrar and the proper proceedings are not taken to remove the names of dead persons. We have occasionally had to point out in THE LANCET reasons for thinking that the precautions taken by the Council to insure an accurate list are not faultless, but a great deal of hard work has been expended upon the Register lately and with good result. All that is now needed is the systematic assistance of those whose names make up the roll and this they should give in their own interests and that of the profession. At the present moment, in view of the approaching election of Direct Representatives, it is most important that all practitioners should assure themselves that they have their correct address inserted, otherwise not only will they possibly lose their votes but they will run a considerable risk of having their names erased from the Register. If the Registrar of the Council in sending out the voting papers is unable to get into communication with anyone the person in question is liable to be removed temporarily from the list. We understand that no circulars of inquiry are being issued this year from the central office because the sending out of voting papers will in itself form a means of correcting the roll, while the proofs of the Register are likely to go to press early in the summer. We therefore urge upon all our readers the necessity of seeing at once that the Registrar is supplied with their correct addresses. Not only has the General Medical Council the right to expect that members of the profession should lend their assistance in keeping the roll accurate but the public has the same right. The Medical Register is published by Act of Parliament for the definite purpose of allowing the public to ascertain who is and who is not a qualified medical man, and we should all try to keep the public rightly informed upon a matter of vital importance.

MEAT FOR THE SOLDIER.

ON May 30th, in the House of Commons, Mr. Barrie asked the Secretary for War whether any alteration had been made in the form of tender for contracts to the army; whether such forms until recently stipulated for the supply of "home-fed" meat; and whether the new forms had been adopted in order to enable "foreign-fed" meat to be supplied to the army. Mr. Haldane said the reply to the first two questions was in the affirmative. The object of the alteration in the contract was not that suggested by the honourable Member but to get the "best fresh" meat at the "lowest" price for the soldier. It may be of interest from a health point of view to consider whether, by this new form of tender, the soldier will get the "best fresh" meat, though certainly it can be obtained at a lower price. In the new form of contract the term "home-fed" has been replaced by the term "home-killed"; this, of course, allows the contractor to supply any American or Argentine meat so long as it is killed in England. The health of the soldier is a most important study and so should be his food, and it is stated in the *Daily Telegraph* of May 30th that the meat supplied to our soldiers and sailors costs something like £2,000,000 per annum. And it is well, now that the public are hearing daily some new details regarding American meat, to think what the terms of Mr. Haldane's new contract form may lead to. That the meat-supply for our army has not been what it ought to have been, even under the old contracts, was the subject of a series of letters in the *Meat Trades' Journal* during the early months of this year. And the two chief subjects for complaint were: (1) the letting out of contracts to subcontractors; and (2) inadequate supervision of the meat by officers who had not made meat inspection a study. Into the last of these complaints we need not enter now for classes are being held at the Metropolitan Cattle Market and elsewhere at which officers of the army can obtain efficient instruction in the inspection of meat; and officers of the Army Service Corps have to pass an examination in this subject. But with regard to the first, that is even stronger than before; if under the old contract English firms were able to sublet their contracts what security can there be, if these contracts are obtained by American firms, that these will not also sublet their contracts and feed the poor soldier on inferior American beef? The contract need not

even be sublet; these large firms can send all their inferior surplus cattle over to England and have them killed here; so long as they are "home-killed" they are available as food for the British soldier. Now, is the danger of American firms being able to obtain these contracts imaginary or real? It is very real. The important contract for the supply of meat for the troops quartered in London, Woolwich, and Windsor for 12 months has been placed with an American firm, and unless far more strict supervision over the meat supply of the army is exercised in the future than has obtained in the past the result of Mr. Haldane's new contract will be that the British soldier may get the meat at the "lowest" price but probably not the "best fresh."

OZONE IN LONDON.

FOR more than a week a steady breeze from the east and south-east has swept over the metropolis and the sky has been clear and the sun shining. It is interesting to remark that the air from the east supplies, as a rule, the purest atmosphere to London although it may be keen and trying to delicate constitutions. Perhaps there is no surer indication of the purity of the air than the presence in it of a perceptible quantity of ozone and some tests which we have made during the recent spell of the easterly wind have shown the air to be distinctly ozonised. Indeed, chemical tests proved to be superfluous, as to the educated nose the presence of ozone was quite obvious from its peculiar "metallic" smell. In spite of a belt of factories round the metropolis, in spite of the great number of domestic fires, and in spite of the incomplete products of combustion of motor spirit which emanate from motor vehicles in the streets it is clear that London air can show such a degree of purity as actually to give quite distinct evidence of the presence of ozone. It is not a little remarkable that ozone should be found in the air in the midst of the metropolis, seeing how very readily ozone is destroyed by organic impurities such as smoke, animal exhalations, and so forth, and it is interesting to speculate as to why it is that London's source of ozone is invariably the wind which comes from an easterly direction. The nearest sea points to London are, of course, those which are situated on the east and on the south, the distance being from 40 miles, as in the case of the estuary of the Thames, to the east, and 50 miles, as in the case of Brighton, to the south. The south-westerly or the due south wind, however, rarely shows any appreciable quantity of ozone by the time, at any rate, that it reaches London, or at all events the quantity that it may contain at the sea border is so small as to be reduced to *nil* when it reaches a few miles inland. It is probable that the dry winds of the easterly direction pick up more ozone than do the moist winds coming from a southerly or south-westerly direction, and, in fact, are loaded to such an extent that ozone is still very perceptibly present when the wind reaches the metropolis. The formation of ozone is in all probability greatly stimulated by the passage of dry air over moist surfaces. It follows that on account of its dryness the east wind in London is more likely to be charged with ozone than the wind from any other direction. Ozone, in short, appears to be a by-product, so to speak, of the great natural and important process of evaporation, and the more rapidly this evaporation takes place, as when a very keen dry wind blows over the surface of a foaming sea, the greater will be the production of ozone. While the presence of ozone in the air, however, is proof of the organic purity of that air, it does not follow that such air—keen, bracing, and dry as it usually is—is suited to everybody's respiratory comfort. On the contrary, it is well known that respiratory affections increase in their intensity and claim more victims during the prevalence of a hard, dry, east wind than when the soft westerly or south-westerly winds predominate. There are obvious reasons, chiefly of a physical kind, for this, but it may be remembered that ozone is a powerful irritant of the respiratory organs and may even have poisonous effects when inhaled in a fairly pure state. The robust, however, generally find the east wind bracing and exhilarating, and there can be little doubt that when the purity of air is so good that there is even ozone present in it the processes of respiration and nutrition are materially helped and the body thus gains health, vigour, and tone.

ASYLUM DYSENTERY.

THE fact that dysentery still occurs in asylums for the insane, although it may be said practically to have disappeared from the country at large, so that cases are but rarely seen in general practice and in other institutions where large numbers of people are congregated, such as hospitals, infirmaries, workhouses, and prisons, is evidence of the existence in the insane of some condition or conditions rendering them peculiarly susceptible to this disease. Confirmation of this view is to be found in the consideration that dysentery occurs not only in old but also in new asylums where no hygienic defects can be pointed to other than some degree of overcrowding, and even this evil is greatly mitigated by the abundant exercise which the inmates of asylums enjoy and by the renewal of air which is provided for whilst the wards are thus empty. Moreover, overcrowding when it does exist in asylums is not comparable to the conditions obtaining in this respect in the poorer districts of great towns. As regards personal hygiene, whilst some of the insane are no doubt filthy in their habits, these are by no means the only ones whom dysentery attacks, and the personal cleanliness of the majority of the inmates of an asylum, including that of very many of the patients attacked, is far superior to that exhibited by numbers of the sane poor. It has hitherto been chiefly a matter of speculation as to the manner in which this susceptibility of the insane to dysentery is brought about. It has been assumed that their vitality and general power of resistance to infection are reduced owing to the impairment of the trophic nerve function. The problem is largely divested of theoretical considerations and placed upon a scientific basis in a paper on the Etiology of Asylum Dysentery contributed to the *Journal of Mental Science* for April by Dr. W. Bernard Knobel and founded upon a careful inquiry conducted by the writer at the London County Asylum, Bexley, and upon other facts collected by him. Evidence of a definite kind is adduced to show that an association exists between lesions of nerve cells and fibres of the spinal cord and ganglia and atrophy of the cerebral gyri on the one hand and diseased states of certain abdominal viscera, including an acute inflammatory condition of the colon, on the other; and reasonable grounds are furnished for the belief that neurotrophic influence is impaired in many cases of insanity. Dr. Knobel is further of opinion that the existence of what has been called the "privy atmosphere" in asylum wards is a factor predisposing patients to dysentery. He formulates the following conclusions: that there is strong evidence in favour of the view that not one but many micro-organisms, either singly or as a mixed infection, can give rise to dysentery; that disturbance of the subsoil in the neighbourhood of an asylum is very liable to be followed by an outbreak of dysentery in that asylum; that evidence supports strongly the view that asylum dysentery can be caused by some micro-organism which normally inhabits the colon and becomes pathogenic when the resisting power of the tissue is sufficiently reduced; that statistical evidence is entirely against the view that dysentery is spread by the transfer of recovered cases from ward to ward; and that the increased precautions which have been taken during the past few years have made no

appreciable difference to the incidence of, or the mortality from, this disease. With respect to the last statement, it is satisfactory to learn from the last report of the Commissioners in Lunacy—which, however, only compares the figures for two recent years—that whereas in 1903 the incidence of dysentery was at the rate of 14·7 per 1000 inmates of asylums and the deaths from this cause amounted to 398, or 3·4 per cent. of the total mortality, in 1904 the incidence-rate was 11·8 per 1000, and the deaths numbered 254, or 2·9 per cent. of all deaths. The report further records an appreciable falling off of the disease in the larger asylums where it most prevails, whilst the increase in the smaller asylums was due to an outbreak which occurred in one of them. Of the total number of asylums dysentery occurred in 69·3 per cent. in 1904, as compared with 72·5 per cent. in 1903. As regards the London County Asylums Dr. F. W. Mott's report for the year 1904–05 states that the number of cases of dysentery which occurred in these institutions during the year ending Feb. 28th, 1905, was practically the same as in the preceding year, when a marked improvement upon all previous years was apparent. From a table furnished by Dr. Knobel it appears that the percentage of deaths from dysentery to deaths from all causes in these asylums fell progressively from 5·6 in 1901 to 3·8 in 1904.

THE GREENWICH OBSERVATORY.

IN an annotation in THE LANCET of Feb. 24th, p. 537, under the heading of "Power-Generating Stations and the Smoke Nuisance," we stated that one of the London County Council's stations generating electricity for the South London tramway service "threatens the destruction of a national—we had almost written international—institution." We referred, of course, to the power-generating station at Greenwich and the Royal Observatory. This statement was denied in certain quarters but we now have complete confirmation that such is the case from the authorities themselves at the Greenwich Observatory who have recently declared that the County Council has put up a generating station near to the Observatory which, by reason of its tall chimneys, the smoke and hot air emitted, and the vibration caused by its colossal machinery, threatens to render the numerous valuable scientific observations made there useless. It is hardly credible that Parliament, knowing full well the proximity of the power station to the Observatory, and in view of the repeated warnings given by the Observatory authorities as to the mischief which the erection of such powerful electric machinery would be likely to cause, should have authorised the plans and the site. As it is the scheme, costing close upon a million of money, is now found on its completion to threaten to annihilate the time-honoured institution at Greenwich. It is certain that one or the other building must go. If the work of the generating station is to be stopped the ratepayers may well have something to say about the extraordinary waste of their money which the suspension or abandonment of the station must necessarily involve. And assuming that the smoke and acid vapours are suppressed there is still the question of the enormously disturbing effect of vibration to be faced. To remove the Observatory would be nothing short of a national disaster. With perhaps the exception of acute strained relations existing between two great civilised countries, a more serious *impasse* can hardly be imagined. We are asked to remove what practically has been the world's standard of astronomical observations for a period of over 200 years in order to accommodate what would appear to be the blunderings of our modern Government authorities and the wilfulness of a modern administrative body and it is important to bear in mind that on the correctness of the daily observations made at Greenwich depends the safety of the whole navigating world. The removal of the Observatory would lead to a confusion which can hardly be thought of. It is one of the most extraordinary deadlocks of modern times and how a satisfactory solution of the difficulty is to be found seems at present to pass the wit of man.

MEDICAL EXCURSION TO GERMANY.

WE are informed that arrangements have been made for the Excursions Médicales Internationales to visit the principal scientific institutions in Germany, such as universities, hospitals, thermal stations, and the like, during the current year. The excursion will leave Paris on the evening of Thursday, August 9th. The itinerary is as follows:—August 10th, Aix-la-Chapelle, Cologne; August 11th, Cologne to Bonn; August 12th, Bonn; August 13th, Wiesbaden; August 14th, Frankfort; August 15th, Marburg; August 16th, Leipsic; August 17th to 19th inclusive, Berlin; August 20th, Dresden; August 21st, Heidelberg; and August 22nd, Baden-Baden. The excursion will return to Paris on Thursday evening, August 23rd. We learn that the medical profession in Germany, together with various burgomasters and municipal authorities, are coöperating in the scheme. Receptions will be given to the party in the various towns and at Marburg all medical men will be admitted to view the Institute of Hygiene of Professor von Behring. Applications for tickets should be made in any case before July 20th and these tickets with any other information may be obtained from M. Etienne Bazot, 184, Rue de Rivoli, Paris.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

ON Thursday, July 5th, a meeting of Fellows of the Royal College of Surgeons of England will be held for the purpose of electing three members of the Council. The following list of the 24 members of the Council shows the present constitution and the date at which each member is due to retire. The date of the first election is given in every case in which the member has been elected to the Council more than once.

Retire in 1913: Mr. Edmund Owen, St. Mary's Hospital; Mr. Rickman J. Godlee, University College Hospital; and Mr. C. H. Golding-Bird, Guy's Hospital.

Retire in 1912: Mr. H. Gilbert Barling, Birmingham General Hospital; and Mr. Anthony A. Bowlby, St. Bartholomew's Hospital.

Retire in 1911: Mr. H. T. Butlin, St. Bartholomew's Hospital (first elected 1895); Mr. G. H. Makins, St. Thomas's Hospital; and Mr. C. T. Dent, St. George's Hospital.

Retire in 1910: Professor Howard Marsh, St. Bartholomew's Hospital and Cambridge (first elected 1892); Mr. J. H. Morgan, Charing Cross Hospital; and Mr. H. H. Clutton, St. Thomas's Hospital.

Retire in 1909: Mr. A. W. Mayo Robson, Leeds Infirmary (first elected 1893); Mr. W. Watson Cheyne, King's College Hospital; and Mr. R. Clement Lucas, Guy's Hospital.

Retire in 1908: Dr. J. Ward Cousins, Royal Portsmouth Hospital (first elected 1895); Mr. A. Pearce Gould, Middlesex Hospital; and Mr. W. Harrison Cripps, St. Bartholomew's Hospital.

Retire in 1907: Mr. J. Tweedy (President), University College Hospital (first elected 1892); Mr. H. W. Page, St. Mary's Hospital; Mr. C. W. Mansell Moullin, London Hospital; and Mr. Frederic S. Eve, London Hospital.

Retire in 1906: Mr. John Langton, St. Bartholomew's Hospital (first elected 1890); Mr. Henry Morris, Middlesex Hospital (first elected 1893); and Mr. F. Richardson Cross, Bristol Royal Infirmary.

We understand that Mr. Richardson Cross and Mr. Henry Morris will apply for re-election but that Mr. Langton will not offer himself as a candidate for a further term of office. The following are new candidates—Mr. G. A. Wright of Manchester, Mr. C. J. Symonds of Guy's Hospital, and Mr. W. Bruce Clarke of St. Bartholomew's Hospital. It will be

remembered that Mr. Bruce Clarke was a candidate at the last election but withdrew his name before the polling day.

THE DEATH-RATE IN IMPROVED DWELLINGS.

THE Metropolitan Association for Improving the Dwellings of the Industrial Classes has issued its sixty-second annual report, from which it appears that the mean population of the dwellings owned by the association during the year ending in March last was 5442 persons. The report further states that the rate of mortality during the year among the residents of the dwellings of the association, including 20 deaths which occurred in hospitals, infirmaries, and similar institutions, was but 12·7 per 1000, against 15 6 the mean rate in the entire population of the county of London. Moreover, the proportion of deaths of infants under one year of age in the dwellings of the association did not exceed 76 per 1000 births, whereas the mean proportion in the whole of London was 131 per 1000. The birth-rate among the residents of these dwellings was equal to 28·9 per 1000 and exceeded by 1·8 the mean metropolitan rate. These statistics undoubtedly imply the satisfactory health condition of the residents of these dwellings and should afford gratification to the shareholders who have furnished the capital for the beneficent work of the association. In estimating the true value of these figures, however, it should be borne in mind that the age-constitution of the residents in improved dwellings is almost invariably favourable to a low death-rate; that they consist for the most part of the more well-to-do and thrifty section of the working class; and that, as residents in these dwellings, they do not contribute their due proportion of the deaths recorded in the workhouse infirmaries. The Registrar-General reports in his last annual summary that no less than 19·3 per cent. of the deaths registered in London during last year were recorded in the metropolitan workhouses and workhouse infirmaries.

THE SEPTIC TOUCH.

IT is, of course, not humanly possible to practise a standard of personal cleanliness which will defy bacteriological inquiry but all the same it must be admitted that cleanliness is on the whole an enemy to disease. We cannot go about our ordinary daily pursuits with sterilised faces and hands, breathe sterilised air, drink sterilised water, and eat sterilised food. In other words, we cannot adopt the same bacteriological refinements in everyday life which the surgeon must insist upon during an operation or the bacteriologist when he prepares pure cultures. We live, it is true, in an atmosphere of bacteriological entities many of which are pathogenic and the most we can do is to guard ourselves against their attacks by preserving a standard of vitality and resisting power by rendering common allegiance to hygienic laws. And in this matter we may favour our chances of a healthy life by avoiding sundry daily habits which, as the teachings of bacteriology, and indeed of commonsense, show, are not free from risk. We need not lick the postage stamp, or submit to the operations of a barber who does not take reasonable antiseptic precautions, or, in our own homes at all events, drink out of a dirty glass or eat from a dirty plate. It is often difficult, however, to avoid circumstances which involve a septic touch. What assurance is there of the cleanliness of the glass at refreshment bars; of the knife and fork at the café? What filth may linger in the chinks of the coins of the realm, what objectionable dirt may be left on the door handle? and so forth. While in many instances we fear that it is impossible to introduce the refinements indicated, yet there are obviously several directions in which a better and more cleanly system than exists could be introduced. We may mention one. The common water tap is necessarily turned on or off by the dirty hand but it would be much more convenient, and certainly more cleanly, if the supply of water could be controlled by a pedal valve. In that case the hands would be left perfectly free and there would be no tap to be soiled by dirty hands. The pedal valve would also defeat the habit of those slovenly persons who commence to wash their hands before the tap is turned off and then when sufficient water has been obtained turn the tap off with wet and soapy hands.

OVARIAN GRAFTING.

THE distressing results which so often follow the complete removal of the ovaries are at times so marked that it is not surprising that a number of experiments have been carried out by various observers in an attempt to transplant successfully these organs from one animal to another. The results obtained have, on the whole, been encouraging but up to quite recently no case had been recorded in which this operation had been so successful as to be followed by pregnancy in the human female. In our present issue p. 1725, a most interesting case is recorded by one of our American correspondents in which Dr. Robert T. Morris transplanted portions of ovary from one patient to another, with the result that the latter became pregnant. Both ovaries were removed by him for cirrhosis with a Tuffier's angiotribe from a patient 21 years of age. Ovarian grafts taken from a woman, the mother of three children, who was suffering from prolapse of the uterus, were implanted in the broad ligament on either side in slits in the peritoneum. The patient made a good recovery; four months after the grafting menstruation occurred, once again six months later, and then regularly. The operation was performed on Feb. 11th, 1902, and on March 15th, 1906, the woman was delivered of a child weighing seven and a half pounds. This is the first case of conception that Dr. Morris has met with in the 14 cases of ovarian grafting which he has performed. Such a case is, of course, always open to the criticism that the ovaries were not completely removed at the first operation but every care seems to have been taken to insure this. The success which has attended this operation in animals renders the possibility of pregnancy occurring in the human subject after implantation of a portion of an ovary of another person by no means so improbable as it might appear to be at first sight. As long ago as 1896 E. Knauer showed that ovaries could be completely severed from their normal surroundings and successfully transplanted either to an adjacent part of the broad ligament or even to some distant part of the body, such as the abdominal wall, and yet would continue to grow and to produce abundant Graafian follicles. His observations have been confirmed by numerous other experimenters who have proved not only that the ovaries of one animal can be transplanted into another animal of the same species but that they can also be successfully engrafted into the body of an animal of another species, as, for example, from the dog to the rabbit. It appears, however, that whilst in the former case the ovaries continue to live and to produce Graafian follicles and even mature ova so that it is possible that pregnancy might follow, when the transplantation takes place from one species to another the engrafted organ tends to atrophy and eventually to disappear. Indeed, some observers, as, for example, Arendt, contend that this occurs in all cases sooner or later and that the transplanted organs never retain their normal functions for any length of time. The experimental evidence, however, so far published seems to show that we may anticipate results in the future not less successful than that obtained by Dr. Morris from this mode of treatment, and that we may hope in this way to relieve

some of the distressing symptoms of the artificial or even the natural menopause and to remove the unfortunate sequel of sterility from cases where removal of both ovaries is called for in young women.

THE SECOND INTERNATIONAL CONGRESS OF THE ASSOCIATION FOR THE PROMOTION OF HYGIENE AND SALUBRITY IN DWELLINGS.

FROM Sept. 4th to 10th there will be held at Geneva the International Annual Congress of this association under the presidency of Dr. Vincent, State Councillor for the Canton of Geneva. The object of the meeting, which is under the patronage of M. Marc Ruchet, Vice-President of the Swiss Confederation, is to appeal to professional men of all countries—medical men, hygienists, and architects—to deliberate in common on a problem which affects the health and the prosperity of all civilised countries—namely, how best to secure healthy homes for the people. Representatives from all the countries of Europe, the United States, and Canada will attend and a provisional programme of the Congress has just been issued. The subjects dealt with in the various sections will be dwelling houses, lodgings, and places of assembly, including hospitals, military establishments, public halls and industrial establishments, school houses, means of travel, art and decoration in their relation to health, and sanitary administration. Among the members of the English committee are the Duke of Northumberland, Sir Shirley F. Murphy, and Colonel J. Lane Notter, R.A.M.C. (retired). Intending members should apply to M. Zambra, treasurer, 12, Rue Petitot, Geneva, inclosing 20 francs if they wish to receive the publications of the Congress or 10 francs if the publications are not desired.

THE FIRST GARDEN CITY.

THE directors of the First Garden City, Limited, issued invitations to the press to journey to Letchworth, near Hitchin, on Saturday last, June 9th, and to inspect the progress which has been made with their scheme during the past two and a half years. As is well known, it is hoped that the Letchworth Garden City will form the model for similar communities in the near future. Any attempt to ameliorate the conditions under which those live who are compelled to dwell in towns must receive the sympathy of all who are interested in the social welfare of the people, and on this account the experiment at Letchworth will be watched with no little interest by all medical men. The object of the promoters of the scheme is to create a town of about 30,000 inhabitants on an area of 3818 acres of which the company possesses the freehold. About 1300 acres will be used for the erection of the town and the remaining 2500 acres will be retained for agricultural purposes. The company will let the land on lease at a ground rent and the dividends to shareholders of the company will be limited to a cumulative dividend of 5 per cent. per annum. The remaining profits will be used for the benefit of the town or its inhabitants. As some evidence of the progress which has been made since the inception of the scheme, it may be mentioned that in September, 1903, the population of Letchworth was about 400 and no facilities existed for drainage or the supply of water or gas. The population is now more than 1600, including 400 artisans and labourers. There are also 600 men working on the estate who do not live upon it and of these half have indicated their desire to secure housing accommodation in the "city." More than four and a half miles of new roads have been made and 14¼ miles of water mains, eight miles of gas mains, and eight miles of sewers have been laid. Water and gas works have also been constructed. The present water-supply is sufficient for a town of 6000 and the gas works are capable of producing 6,000,000 cubic feet of gas per annum. Both gas and water works may be easily enlarged. A temporary passenger station and railway sidings have been made in connexion with the Great Northern Railway. Cottages, the rents of which range from a minimum sum of 4*s.* 9*d.* upwards per week, with a minimum garden space of about seven poles, are let almost as soon as the foundations are laid. Buildings of a capital value of £162,000 have already been erected or are in course of erection. In addition to the dwelling houses 25 shops, a church, a chapel, a public hall, and schools and seven factories have been, or are being, built or have had their sites marked out. The report of the Central London Unemployed Fund seems to show that probably the most successful colony being financed by the fund is that at the Garden City. All these circumstances seem to point to the future success of the scheme.

VOYAGES D'ÉTUDES AUX EAUX MINÉRALES.

THE eighth annual excursion of this association will be to the mineral water stations of Savoie and of Dauphiné. It will start from Lyons on Saturday, Sept. 1st, and end at Uriage on Wednesday, Sept. 12th. The total price to be paid, which is 300 francs or £12, includes every expense between these two places. The French railways will grant a ticket at half price for those taking part in the excursion, for Frenchmen between their residence and Lyons and for foreign medical men from the station at which they arrive in France to Lyons, and a similar reduction will be granted from Uriage to the town of residence or to the French town of departure. The district to be visited includes Hauteville, Évian, Aix-les-Bains, Salins-Moûtiers, and Brides. The whole excursion will, as in former years, be under the direction of M. Landouzy, professor of clinical medicine in the Faculty of Medicine of Paris. Those taking part in the excursion may be medical men and their wives and students of medicine. The names of those wishing to take part must be sent so as to reach Paris on or before August 15th and the subscription, £12, must be sent with the name either to Dr. Carron de la Carrière, 2, Rue Lincoln, Paris, or to Dr. Jounaust, 19, Rue du Colisée, Paris. Fourteen free passes (*bourses de voyage*) are to be distributed this year which are to be allocated to members of certain classes; thus one provided by Professor Henrot is to be given to an interne of the Rheims hospitals, while five are provided by the Société d'Évian which are to be allocated respectively to an English medical man, a Danish medical man, two Italian medical men, and a student in medicine whose thesis for the doctorate of the Faculty of Lyons has been accepted during the scholastic year 1905-06. Only 20 places can be allotted to medical men from this country, and the attention of our readers is hereby called to a letter from Dr. Leonard Williams which appears in another column.

DURET'S BALSAM.

AN antiseptic ointment has recently been prescribed in France by dermatologists under the name of Duret's balsam (baume Duret). According to the *Journal de Médecine et de Chirurgie Pratique* it is composed of the following ingredients, the proportions being in parts by weight: coal tar, 18; oil of cade, 15; resorcin, 2; menthol, 5; guaiacol, 5; camphor, 40; sulphur, 15; borax, 36; glycerine, 50; acetone, 80; castor oil, 40; and wool fat, 100. When made according to M. Duret's directions the ingredients combine together but if the necessary precautions laid down are not observed the ointment is liable to possess irritating properties. The sulphur is prepared by crystallisation from a hot saturated solution in turpentine. It dissolves in the mixture of coal tar, oil of cade, castor

oil, and wool fat when heated together at 130° C. in a closed vessel. Acetone was chosen as an ingredient owing to the fact that it mixes readily with water and with fats; moreover, it possesses well-marked penetrative and sedative properties. The "balsam" belongs to the "blunderbus" class of preparations; it contains, as is shown above, nine antiseptics and some of these are mild stimulants to the skin. Sulphur is soluble in castor-oil and the solution was formerly used under the name of "balsam of sulphur." Duret's balsam is likely to be useful in mild cases of microbic diseases of the skin but on the whole such very complex applications as these are against the tendency of modern therapeutics. The "balsam" is more likely to be employed by those with little knowledge of dermatology than by those who are specially conversant with diseases of the skin.

SIR HALLIDAY MACARTNEY.

Sir Halliday Macartney, who died on June 8th at his residence near Dalry, Kirkcudbrightshire, was a typical instance of a medical man exchanging his original profession for a totally different field of activity in which he attained conspicuous success. He was born in 1833 at Auchenleck, near Castle Douglas, in the above county, studied medicine in Edinburgh, and graduated as M.D. at the University of that city. Immediately obtaining an appointment as assistant surgeon to the 99th (now the Wiltshire) Regiment, he proceeded with it to India about 1858. From India the regiment in 1860 went to China, where he left it to join the native army sent by the Peking Government against the Taiping rebels. In this new capacity he commanded a Chinese force which he had himself raised, and he, moreover, attracted the attention of the Chinese general Li Hung Chang, an influential personage who spent some time in London a few years ago. The Taiping Rebellion broke out about 1850 and was ultimately suppressed in 1865, chiefly through the military skill of the late General Charles George Gordon and other British officers in the Chinese service. On the conclusion of hostilities Mr. Macartney held an appointment for several years at Nanking arsenal and married a Chinese lady, by whom he had a numerous family. About 1876 he returned to London as a member of a political mission sent by the Chinese Government and filled important positions in connexion with the Chinese diplomatic service, mainly in London, with occasional visits to several continental capitals. In 1885 he was created K.C.M.G. and about six months ago he retired from official life, having spent more than 40 years in the Chinese service. This long political experience and his unquestionable diplomatic ability did not, however, save him from committing a very serious irregularity in October, 1896, when in his position as Councillor and English Secretary to the Chinese Legation in London he sanctioned an attempt to kidnap a person who was politically obnoxious to the Peking Government. This was a Chinese medical man named Sun Yat Sen who was captured in London and kept a prisoner in the Legation for the purpose of being forwarded to China where he would certainly have been executed. Fortunately for him he was known to Mr. James Cantlie who, in conjunction with Sir Patrick Manson, took steps which led to his release. An outline of the incident will be found in THE LANCET of Oct. 31st, 1896, p. 1249. Sun Yat Sen almost immediately after his liberation attended the annual dinner of present and past students of Charing Cross Hospital and replied to a toast in which his case was mentioned. Sir Halliday Macartney was a mandarin of the second degree. He was twice married, first to a Chinese lady, as already mentioned, and afterwards to a French lady who died about four years ago.

THE Cavendish lecture of the West London Medico-Chirurgical Society was delivered by Sir William Macewen, F.R.S., at the Kensington Town Hall on June 8th, the subject being "Some Points in the Surgery of the Chest." There was a very large attendance of members and friends. A conversazione followed the delivery of the lecture and there was also an interesting exhibition of apparatus, instruments, and drugs.

Dr. W. Osler, F.R.S., Regius professor of medicine in the University of Oxford, will distribute the prizes to the students of St. Thomas's Hospital on Wednesday, June 27th, at 3 P.M., in the Governors' Hall.

Dr. J. S. Haldane, F.R.S., has been appointed by the King one of the commissioners to report on certain questions relating to the health and safety of miners and the administration of the Mines Acts.

WE desire to draw the attention of our readers to a warning notice in our advertisement columns regarding certain vacant appointments.

CONGRESS FOR THE REPRESSION OF THE ILLEGAL PRACTICE OF MEDICINE.

Held at Paris from May 28th to 31st.

A CONGRESS for the Repression of the Illegal Practice of Medicine was held at Paris during the last week in May and lasted for four days. It opened on May 28th in the Examination Hall of the Assistance Publique, the walls of the hall being hung with various specimens of quack advertisements. The meeting was opened by Professor BROUARDEL in the presence of about 300 French and foreign medical men, of delegates from the Minister of the Interior and the Minister of Public Instruction, and of the Prefect of Police.

After the reading of the report of the SECRETARY-GENERAL, Dr. LEVASSORT, upon the preliminary work of the Congress, sundry interesting papers were read. The first was that of Dr. POULIOT on the illegal practice of medicine by bone-setters, wise men (*sorciers*), and other quacks of the same kind. The speaker reminded his audience that it is above all in small towns and villages that bone-setters abound. In every age persons of this class have played a great part in popular medicine and have been consulted for sprains, synovitis, rupture of muscles, and slipped tendons. Dr. Pouliot then went on to speak of the healer—viz., that kind of quack who prefers to treat internal maladies by means of primitive or "natural" remedies. With regard to the "touchers," who, according to popular belief, cure by laying on of hands and the recitation of magical formulæ, and of "wise men" or fortune-tellers, who have a great renown in their immediate neighbourhood and whose reputation even extends to neighbouring villages, Dr. Pouliot gave various instances of the way in which these quacks exploit their dupes. The magistrates will never give instructions for prosecuting a quack except when a definite formal complaint is laid before them and as the initiation of a prosecution is not undertaken by the magistrates and very rarely by the public it generally falls to the lot of the medical man to perform this duty, but isolated medical men have very few chances of succeeding in this task. Dr. Pouliot therefore proposed that medical associations should invite their members to bring to the knowledge of the committee any fact of illegal practice of medicine, with the view of drawing up a *dossier* dealing with all the quacks in their own particular district, that no prosecution should be undertaken without an absolutely definite *dossier* upon which to found the prosecution, that such prosecution should be above all directed against well-known offenders (*récidivistes*) and individuals who have brought about aggravation of the disease or definite injury, or who are obvious swindlers, and that the medical association should demand that besides the fine the judgment of the court should be posted up at the expense of the defendant in all the parishes of the district where the

offence was committed. Dr. Pouliot asked the Congress to pass a resolution that instructions should be given to the heads of elementary schools (*instituteurs*) begging them to fight against the influence exercised by healers, touchers, and "wise men" and that all students in medicine should be taught in a strictly practical manner the treatment of the most common traumatic affections of the limbs.

Various speakers followed in support of these demands, among whom were Dr. DANJOU, Dr. GRANJUX, Dr. ARCHAMBAULT, and Dr. VIMONT.

A long discussion then took place on the possibility of the passing of a law making it necessary for any judgment obtained against quacks to be posted up in public places.

M. BARBANNEAU then took up the question of the illegal practice of medicine by hypnotists and magnetisers. After having shown the singularly evil influence which these two kinds of quacks exercised and having reminded his audience that magnetisers had already formed themselves into a syndicate, M. Barbanneau, after having referred to various grotesque advertisements issued by these two classes, asked the Congress to declare: (1) that all quacks should be mercilessly prosecuted; and (2) that despite the request of the magnetisers who wished to differentiate between magnetism and hypnotism on the ground that hypnotism should belong exclusively to medical men who practised as neurologists, while magnetism should belong to magnetisers, both these therapeutic measures should be exclusively reserved for use by medical men who alone could apply them without danger to the patient.

The next communication, made by an advocate of the Court of Paris, M. BRUNO-DUBJON, dealt with the illegal practice of medicine by laymen or members of religious orders under the pretence of charity.

Another paper, read by M. DIGNAT, dealt with much the same subject, for it concerned the illegal practice of medicine by members of aid societies. M. Dignat argued against the very complete programmes which, according to him, such societies drew up and he put forward the opinion that the work of such societies should be very considerably curtailed and that instruction should only be given in purely first-aid knowledge. He also considered that such associations or societies should in future not be allowed to give any diploma or certificate of studies. After a warm discussion these two opinions of M. Dignat were adopted as resolutions by the Congress.

M. MESNARD, who followed, dealt with massage and schools of massage. He considered that no one in future should be able to give medical massage in France unless he had obtained the diploma of Doctor in Medicine.

A paper by M. CHARLES MATHIOT dealing with medical massage, chiefly from the legal point of view, wound up the first sitting of the Congress.

The second day's sitting was opened by M. MILIAN speaking upon illegal practice by barbers and hairdressers who pretend to cure affections of the hairy scalp, or who sell products supposed to be wholesome for the skin and who sometimes injure the health by the sale of complexion washes or other toilet products which are occasionally extremely dangerous. M. Milian demanded that perfumers and hairdressers who sell any products with a therapeutical aim in view should be prosecuted, for such people, he said, illegally practise medicine and pharmacy. Moreover, he considered that the sale of various toilet productions should be strictly regulated inasmuch as they have nothing to do with medicine and occasionally bring about most disagreeable results.

Dr. DUBOUSQUET-LARBORDERIE next spoke about one of the most widespread forms of illegal practice of medicine—viz., that committed by prescribing druggists. He considered that this constitutes a public danger in whatever way it is carried on, whether by means of advertisement, pamphlets, or by practice *sub rosâ* in the back shop or behind the counter. He considered that advertising ought to be considered as an offence and demanded that proprietary medicines should be definitely regulated by the institution of a special committee. He concluded that it would be through the common action of various medical associations that the repression of this particular form of illegal practice would be brought about.

The conclusions of the paper by Dr. BOUDIN upon illegal practice by herbalists and trussmakers (*bandagistes*) were that herbalists no longer answered the end for which they were originally licensed and the Congress passed a resolution that no more should be licensed in future. Moreover, a truss could not be usefully applied unless previously a diagnosis had been made by a medical man and the untimely application of a truss might have the gravest consequences. The Congress therefore considered that no trussmaker should sell one except upon a medical prescription.

Dr. D'AYRENX then spoke upon the irregular practice of medicine by opticians and he concluded by demanding that no optician should be allowed to sell without a medical prescription either simple or compound spectacles but only opera-glasses, telescopes, and magnifying glasses.

Dr. PECHIN followed with a paper on much the same subject—viz., the illegal practice of ophthalmology by opticians and druggists. His conclusions were much the same as those of the preceding speaker, but he added that it should be illegal to practise ophthalmology either anonymously or under some fancy title. In this he was referring to certain quack establishments which are run by non-medical people by the aid of copious advertising and which employ young medical men, very badly paid, to cover their responsibility.

Dr. LAQUERRIERE read an important paper on the Practice of Electro-therapy and Medical Radiology by non-medical persons and he concluded by asking the Congress to decide that medical men should not send any patient who required electrical or x ray methods, either for diagnosis or treatment, to any but a medical man, and, moreover, that they should dissuade such patients as strongly as possible from applying to any unqualified person.

The last incident of the day's sitting was a motion put forward by Dr. DIEUPART forbidding any advertisement or notice of a midwife to contain any mention of any treatment other than that allowed to her by law. Surgical massage, gynæcological applications, medical electricity, treatment of children and diseases of women were included in this interdiction.

The question of the illegal practice of medicine by foreigners, which was raised by Dr. DE GRISSAC, gave rise to a hot discussion. He argued that the French Diplôme d'Etat when given to a foreigner should be merely a scientific distinction and that the right to practise by a foreign medical man, even though he had a French diploma, should only be granted to one who had been through an exactly similar course of education, both ordinary and medical, to that taken out by a Frenchman, and who, in addition, could show a record of certificated attendance (*stage effectif*) of at least three years in a French hospital.

M. HONORAT said that there was a certain number of foreign medical men who were called in in consultation to the Paris hotels and asked that such abuse should cease.

M. LEPAGE remarked that foreign women holding a university diploma had only to marry to become Frenchwomen and to have the right to practise in France.

Dr. DE GRISSAC then referred to the case of medical students who fill the place of medical men without having complied with the necessary legal formalities and Dr. SENTOURENS discussed the behaviour of certain medical men who go outside the privileges conferred on them by law by "covering" certain shady undertakings such as the various "institutes," bogus schools of medicine, "establishments for the cure of secret diseases" (*cabinets vénériens*), and the like, and who help charlatans of all sorts to evade the law.

M. LEREDU, advocate of the Paris Court of Appeal, spoke of the medico-pharmaceutical puffs couched in scientific language and advertised far and wide by unqualified persons.

Dr. FOLET, who followed, spoke of the dangers incident to the illegal practice of medicine and the charlatanism of medical practice by advertisement or correspondence.

Dr. LEREDDE proposed that the Congress should decide that all mishaps due to the illegal practice of medicine should be published and that medical societies should make such mishaps known and should, moreover, demonstrate the dangers and harm of illegal practice, not merely for medical practitioners but for the public at large.

Dr. BARDET spoke on the social causes of the illegal practice of medicine and argued that both primary and secondary education should give special attention to the cultivation of the science of observation. He considered also that the professor of medicine should devote himself entirely to the duties of his chair and that practical teaching should have the predominance over theoretical. Therapeutics and applied hygiene should occupy the chief place in the course of instruction.

Looking Back.

FROM

THE LANCET, *SATURDAY*, June 14th, 1828.

ON SINGLE AND ERECT VISION, BY DR. FORSTER.

To the Editor of THE LANCET.

SIR,—The remarkable account of anomaly in vision, described in your last Number,[1] induces me to write a few observations on the subject, of which I shall beg your insertion. If the boy, (page 229,) whose case is described, saw the houses inverted, and standing on the roof, did their roofs appear to rest on the ground? If so, why did not the ground appear inverted also? And if it did, by parity of reasoning, we must suppose that the patient saw *all objects inverted*; and, in that case, there is an end of the phenomenon of *inversion* altogether; for that term implies the *version* or turning of some objects, in a direction opposite to that of others. I mention these circumstances, merely because they bear immediately on the great question now before the philosophical world. "*Why, with two retinas, both receiving the impressions of external objects inverted, we have, nevertheless, Erect and Single Vision?*" In the paper on optics, published by the Society for promoting Useful Knowledge, no satisfactory account of this phenomenon is given; indeed, all the modern treatises on optics that I have seen, with the exception of one by Mr. Crisp, twenty years ago, have mis-stated the very question itself, and it has been no where well stated or answered; nor have any correct metaphysical views of vision been published of late, except the observations contained in a work, entitled "On the Perception of an external Universe," by the author of "Cause and Effect." In the former of these two works, page 408, are some observations on vision, of such a correct and truly philosophical character, that I am rendering a service to the public, and particularly to those who study optics, by pointing them out through your widely circulated Journal. I have read many modern works on the physiology and pathology of the eyes; but, with the exception of the German surgeon, Beer's, work, and of Mr. Lawrence's excellent lectures, recorded in THE LANCET, I have found in them few new or philosophical observations on the laws and disorders of vision. Indeed, I have *nowhere* seen *this particular part of the subject*, viz. single vision, clearly developed, except in the work alluded to; nor indeed is that all that might be said on the subject. The truth is, that the deeply metaphysical question, *what is the cause of single and erect vision?* is not generally understood; and should nothing appear on the subject before-hand, I intend, as soon as I have time, to communicate some curious observations and experiments through your Journal, prefacing, at the same time, that they would not have been original discoveries of my own, had they not been suggested by the perusal of the work on the "External Universe," above alluded to. The subject involves some very curious considerations respecting "spectral illusions," so often produced by the reaction of the stomach on the brain, in cases of disease. And I shall be obliged by any communications of cases of this sort in your Journal.

Yours, &c.

T. FORSTER.

Chelmsford, May 27th, 1828.

MEDICINE AND THE LAW.

Two Deaths after Vaccination.

TWO recent cases of the death of infants after vaccination may be referred to as exemplifying the risk which attends the duties of a public vaccinator who at any time may be called upon to face inquiry and probably censure owing to circumstances entirely beyond his control. In each case an inquest was held, one of them being conducted by Mr. M. H. Taylor at Richmond. At this the evidence of Mr. T. T. Cockill, the public vaccinator, showed that he had vaccinated an infant ten weeks old at the request of her parents and that on the child being taken to him a second time he had found that the arm was going on well, three of the places having taken. She was taken to him again, however, a few days later when he found that two of the scabs had been rubbed off, according to the account of the mother, by the child turning in bed. The mother had done all that she could throughout the case and the jury by their foreman intimated that in their opinion the medical man "had taken extraordinary precautions" but nevertheless acute cellulitis resulted from the accident and the child died. The district in which the parents lived was described as being exceedingly insanitary. In the other case referred to the inquest was held at Tooting before Mr. Troutbeck. The child, a girl, six months old, had been vaccinated by Dr. S. E. Bligh, public vaccinator, who gave evidence as to the precautions accompanying the performance of the operation, which were of the usual character. The child was vaccinated on May 4th and died on May 9th. Dr. Bligh was closely questioned by the coroner with reference to a statement made by him in the course of his evidence that he had examined the child before vaccinating her and that she "seemed healthy but was rather small." Mr. Troutbeck appears to have thought that the smallness of the baby should have caused the postponement of the operation and he also asked several questions as to the necessity or desirability in the circumstances of vaccinating in four places. To these the reply was that the Local Government Board laid down a rule but that it had been intimated to him by the vaccination officer that vaccination in four places was to be preferred in the absence of some special reason for making fewer. Mr. Troutbeck asked whether the smallness of the child would constitute such a reason and Dr. Bligh answered, "Yes, if the child was very small." This presumably meant that in his opinion the child was not small enough to deserve special treatment on that account. He was asked a variety of other questions, such as whether vaccination was an "illness" and whether the "illness" was "stronger" with four marks than with three. Dr. L. Freyberger gave evidence that he had made a post-mortem examination and had found that the lymph glands in the neighbourhood of the ulcers were slightly enlarged and were of a red colour. Apart from the left arm there was no cellular inflammation in the body. Death was due to broncho-pneumonia and bronchitis of about four days' duration. Mr. J. F. Spong of Tooting, called in the interest of Dr. Bligh, stated that he saw the child on May 8th and found that the ulcers were slowly healing. He then—that is to say, on the day before the child's death—noticed no signs of blood poisoning. The jury apparently accepted the suggestion put before them by Mr. Troutbeck and found, after consultation together, that the child died from broncho-pneumonia while she was in a weak condition from vaccination and added that they considered that the operation ought to have been postponed. It is not easy to see, however, on what evidence this finding was based and it certainly inflicts a hardship on the public vaccinator unless direct medical evidence, not before us, was given in support of it. It is difficult, in other words, to say what conditions were proved to have been present which would not be observable in thousands of cases in which vaccination is not postponed but is performed with safety.

The Fate of Condemned Tinned Foods.

The present discussion as to the circumstances of the original preservation of tinned meats makes it pertinent to inquire as to the fate of such goods as have been condemned upon or after their arrival at British ports, and more especially as to the possibility of the return of such unsound food-stuffs to the market. Cargoes of canned meats or fruits have to pass the scrutiny of the port sanitary authority before they can be introduced to the commerce of the towns for which they are destined. Very much of this class of goods is stored in riverside warehouses for a considerable time before distribution to the retail market. While so stored a second inspection may become necessary, although the technical right to insist upon a re-inspection at this stage is not quite clearly established, for the food is neither exposed for human fare nor is it deposited for the purpose of, or for preparation for, immediate sale; in practice the presumption that one of these alternatives is actually the case is acted upon when necessary. Usually it is found that the wharfingers are only too ready to notify to the local sanitary authority the presence of such unsound stock, for such useless material occupies valuable floor space; they are also as a rule willing to surrender such tinned goods without

[1] See "Looking Back" in THE LANCET, May 26th, 1906, p 1477

much formality. In the case of canned meats they receive about 30s. a ton for condemned tins; for fish and fruit the contractor often demands a small remuneration before he will remove them from the warehouse. The contractor is supposed to boil down the contents of the former tins, extracting the fat for the soap-boiler, and using the residue either as food for pigs or as chemical manure. From time to time a suspicion arises that the better-class doubtful samples of these condemned tins reappear in the market, especially in the cheaper shops which dispose of their stock quickly: occasionally such a garbage-monger is subjected to the publicity of the police court. It has been suggested that all these condemned tins should be incinerated in the municipal dust destructor where such exists and thus their reappearance would be made impossible. The objection to this scheme is that when placed on the fire the contents of the tins damp its ardour, they have very little value as fuel, and further the warehousemen will not part with condemned canned meat without the small recompense alluded to above, which is usually given by the contractor. An alternative plan is to instruct the local food inspector when any crates of blown, slack, or leaky tins have been condemned to see that each tin is spiked before it passes from his sight. In this way the contents soon become quite unfit for human food. An objection to this laborious plan, however, is that sometimes an intolerable stench results, a condition of affairs which is very unpleasant for people who live in the neighbourhood. The question of the disposal of such unwholesome goods is of interest to a comparatively few local sanitary authorities and it it probable that at most very few condemned tins of meat are surreptitiously sold as human food. It is nevertheless essential that the possibility of such a nefarious transaction should be borne in mind by those concerned in the maintenance of the purity of the food-supplies of the public.

THE NATIONAL CONFERENCE ON INFANTILE MORTALITY.

A CONFERENCE on infantile mortality took place on June 13th and 14th at the Caxton Hall, Victoria-street, Westminster, S.W., under the presidency of the Right Hon. JOHN BURNS, M.P., President of the Local Government Board. Mr. EVAN SPICER, Chairman of the London County Council, occupied the chair, and when the conference opened there were present representatives of 105 municipal boroughs, 13 county authorities, 15 other bodies, and 73 official members. The members of the congress numbered between 400 and 500.

Mr. BURNS commenced his inaugural address by welcoming those present, in his capacity not only as president of the Congress but as President of the Local Government Board, to what in his judgment was a useful, necessary, and too long delayed conference. On behalf of Their Majesties the King and Queen, who have accepted the position of patrons of the Congress, the Government, and his own department he expressed sympathy with the aims of the meeting and he promised to render what aid his department could give. Personally, he expected more from the discussion of the subject and the consequent education and enlightenment of the public that would spring therefrom than from anything which his department could immediately do or from legislative help. He looked, he said, with increasing confidence to the help of medical officers of health, the medical profession, the sanitary service of the country generally, to the lay press, and especially to the well-informed medical press which had already done, and was doing, so much in the formation of public opinion. The question of infant mortality was a subject which increased in importance every day. Roughly speaking, 100,000 infant lives were being sacrificed every year to neglect, carelessness, thoughtlessness, and ignorance. In the first year of child life there were as many deaths as in all the other years taken together up to the age of 18. The part which environment played as a factor in infantile mortality was strikingly shown in Dr. T. Orme Dudfield's report on the health of the Royal borough of Kensington which had just been issued and which showed the infantile death-rates in the poorer districts to be sometimes 10 and 20 times higher than those in the richer localities of the borough. The average expectation of life among engineers had during the past 50 years been raised by 10 or 12 years. The average ages of the wives had also been extended by the same period. During that time the infantile mortality had been practically stationary. If men and women could extend the working period of their lives it devolved on them to help the helpless whom they brought into the world. He thought that he saw signs that the end of the evil had been reached, and the result of this congress should be to bring down the infantile mortality rate in the next five or ten years by 30 per cent. or more. While wealth increased and prosperity extended, the weakest, the smallest, and the most dear bore the burden of death. Whatever the chief cause might be of infant mortality the infant, at any rate, was not to blame, but society. He believed that two out of four infantile deaths were preventable. Too often the child bore the burden of the mother's delinquencies. It was an encouraging fact that deaths among illegitimate infants were declining, but an examination of the number of children born and of the death-rate among them was beginning to reveal certain things that medical men must deal with. But the decline in the drink bill of the country he considered to be a hopeful sign. It was not an accident that deaths from overlying were twice as numerous on Saturday night as on any other night in the week, nor that Monday came second, and Sunday third in frequency. He strongly deprecated married women working outside their homes, for not only did the children not receive proper care but in many cases the absence of a housewife encouraged the father to swell the ranks of the loafer. Crèches tended to encourage the mother to adopt the well intended but mistaken policy of going out to work. The effect in some districts of women's labour on child life was deplorable. There was too much labour done by married women, with resulting neglect of infants. He did not think that there was much deliberate cruelty towards infants but there was much harm done by ignorance. Improper feeding was known to be the cause of very many preventable deaths in infants and means must be devised to bring about better feeding. A supply of sterilised milk, together with better housing, had made a considerable difference in the mortality of his own district in London—namely, Battersea. Mr. Burns concluded an interesting and eloquent address by saying that the industrial supremacy of the nation depended upon the health and physique of the people.

The LORD PROVOST of Glasgow (Mr. W. Bilsland) proposed a vote of thanks to Mr. Burns, which was seconded by Sir MICHAEL FOSTER and carried with acclamation.

Mr. BURNS briefly replied, again expressing his willingness to do all to further the aims of the Congress.

Papers were read by Dr. J. NIVEN, medical officer of health of Manchester, Dr. J. SPOTTISWOODE CAMERON, medical officer of health of Leeds, Dr. J. ROBERTSON, medical officer of health of Birmingham, Dr. G. F. MCCLEARY, medical officer of health of Hampstead, Dr. G. NEWMAN, medical officer of health of Finsbury, Dr. J. F. J. SYKES, medical officer of health of St. Pancras, Professor G. SIMS WOODHEAD, Dr. J. W. BALLANTYNE, Dr. J. R. KAYE, Mr. Alderman BROADBENT, mayor of Huddersfield, Dr. GEORGE REID, medical officer of health of Staffordshire, Dr. A. BOSTOCK HILL, medical officer of health of Warwickshire, and others. The titles of the papers will be found in our issue of May 26th, p. 1485.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN 76 of the largest English towns 7242 births and 3907 deaths were registered during the week ending June 9th. The annual rate of mortality in these towns, which had steadily declined in the seven preceding weeks from 17·3 to 13·8 per 1000, further declined last week to 12·9 and was considerably lower than in any previous week of this year. During the first ten weeks of the current quarter the death-rate in these towns averaged only 15·5 per 1000; the average rate during the same period did not exceed 15·6 in London. The lowest death-rates during last week in the 76 towns were 4·2 in Hornsey, 4·7 in Walthamstow, and 5·7 in Handsworth; the rates in the other towns ranged upwards to 17·8 in Manchester, 17·9 in Wigan and in Rochdale, 18·3 in Burnley, 19·6 in Birkenhead, and 23·1 in Bournemouth. The 3907 deaths in the 76 towns showed a further decline of 269 from the decreasing numbers returned in recent weeks, and included 375 which were

referred to the principal epidemic diseases, against 441 and 408 in the two previous weeks; of these, 145 resulted from measles, 95 from whooping-cough, 50 from diarrhœa, 38 from diphtheria, 35 from scarlet fever, 12 from "fever" (principally enteric), and not one from small-pox. The deaths from these infectious diseases were equal to an annual rate of 1·2 per 1000 in the 76 towns and to 1·1 in London. No death from any of these infectious diseases was registered last week in Plymouth, Derby, Preston, Huddersfield, Wigan, St. Helens, and in nine other smaller towns, whereas they caused death-rates exceeding 3 per 1000 in Bootle, Burnley, and Rotherham. The highest death-rates from measles occurred in Salford, Bradford, Manchester, Rotherham, Bury, and Burnley. The fatal cases of whooping-cough showed the largest proportional excess in Bootle, Walsall, and Warrington. The 50 deaths attributed to diarrhœa were fewer by six than those in the previous week. Diphtheria caused three deaths in Halifax and two in Northampton and in Newcastle-upon-Tyne. The greatest proportional fatality of scarlet fever occurred in Birkenhead. The 12 deaths referred to "fever" were fewer than in any previous week of this year. Six cases of small-pox were under treatment in the Metropolitan Asylums hospitals at the end of last week, one new case having been admitted during the week. The number of scarlet fever cases under treatment in these hospitals and in the London fever hospital on Saturday, June 9th, was 2603, showing a further increase upon recent weekly numbers; the 344 new cases admitted during the week exceeded those in the previous week by 32. The deaths referred in London to pneumonia and other diseases of the respiratory organs, which had declined in the seven preceding weeks from 399 to 188, further fell last week to 152 and were three below the corrected average for the corresponding week in the four preceding years 1902–05. The causes of 49, or 1·3 per cent., of the deaths registered in the 76 towns during the week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Portsmouth, Bristol, Leicester, Nottingham, Salford, Plymouth, Norwich, and in 46 other large towns. The proportion of uncertified deaths showed the largest excess in Liverpool, Bootle, St. Helens, Barrow-in-Furness, Sheffield, South Shields, and Sunderland.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in eight of the principal Scotch towns, which had been equal to 17·3 and 17·5 per 1000 in the two preceding weeks, declined last week to 15·6, but exceeded by 2·9 the mean rate during the same week in the 76 large English towns. The rates in the eight Scotch towns ranged from 9·1 and 11·4 in Perth and Paisley to 16·2 in Greenock and 17·5 in Glasgow. The 535 deaths in the eight towns showed a decline of 65 from the number returned in the previous week, and included 22 which were referred to diarrhœa, 17 to whooping-cough, 14 to measles, eight to diphtheria, five to "fever," one to scarlet fever, and not one to small-pox. In all, 67 deaths resulted from these principal infectious diseases, showing a further increase of four upon the numbers in the two previous weeks; they were equal to an annual rate of 2·0 per 1000, which was 0·8 above the mean rate during the week from the same diseases in the 76 English towns. The 22 deaths attributed to diarrhœa showed an increase of nine upon the number in the previous week, and included 12 in Glasgow and four in Dundee and in Aberdeen. The 17 fatal cases of whooping-cough, of which 12 occurred in Glasgow and three in Dundee, were fewer by five than those in the previous week. Of the 14 deaths from measles ten were returned in Glasgow and four in Edinburgh. Diphtheria caused four deaths in Glasgow and two in Dundee. Two deaths were referred to "fever" in Glasgow, two in Dundee, and one in Aberdeen, two of these five cases being certified as cerebro-spinal fever. The deaths in the eight towns referred to diseases of the respiratory organs, including pneumonia, which had been 131, 96, and 95 in the three preceding weeks, were again 95 last week, and exceeded by six the number returned in the corresponding week of last year. The causes of 18, or 3·4 per cent., of the deaths registered in the eight towns last week were not certified, the proportion of uncertified deaths in the 76 large English towns during the same week being only 1·3 per cent.

HEALTH OF DUBLIN.

The annual death-rate in Dublin, which had been equal to 22·4 and 20·2 per 1000 in the two preceding weeks, further declined to 16·4 in the week ending June 9th, a lower rate than has prevailed in the city in any previous week this year. During the first ten weeks of the current quarter the death-rate in the city averaged 22·5 per 1000, against 15·5 in London and 17·8 in Edinburgh. The 134 deaths of persons belonging to Dublin registered during the week under notice showed a further decline of 13 from the numbers returned in the two preceding weeks, and included but two which were referred to the principal infectious diseases, against six and seven in the two previous weeks. Of these two deaths one was a fatal case of whooping-cough and the other of diarrhœa, no death being referred to small-pox, measles, scarlet fever, diphtheria, or "fever." The two deaths from these principal infectious diseases were equal to an annual rate of 0·3 per 1000, the rate from the same diseases last week being 1·1 in London and 1·4 in Edinburgh. The 134 deaths in Dublin last week included 27 of infants under one year of age and 29 of persons aged upwards of 60 years; both these numbers showed a considerable decline from those in the previous week. Seven inquest cases and two deaths from violence were registered, and 52, or 39 per cent., of the deaths in the city occurred in public institutions. The causes of three, or 2·2 per cent., of the 134 deaths were not certified either by a registered medical practitioner or by a coroner, the proportion of uncertified deaths last week being but 0·4 in London and 3·3 in Edinburgh.

VITAL STATISTICS OF LONDON DURING MAY, 1906.

IN the accompanying table will be found summarised complete statistics relating to sickness and mortality in the City of London and in each of the metropolitan boroughs. With regard to the notified cases of infectious diseases it appears that the number of persons reported to be suffering from one or other of the nine diseases specified in the table was equal to an annual rate of 6·4 per 1000 of the population, estimated at 4,721,217 persons in the middle of the year. In the three preceding months the rates had been 6·4, 5·7, and 5·9 per 1000 respectively. The lowest rates last month were recorded in Kensington, St. Pancras, Stoke Newington, Holborn, and the City of London; and the highest rates in Hammersmith, Chelsea, Hampstead, Hackney, Finsbury, Bermondsey, and Greenwich. Six cases of small-pox were notified last month, against six, seven, and one in the three preceding months; of these six cases four belonged to Bethnal Green, and one each to Hackney and Poplar. The Metropolitan Asylums hospitals contained five small-pox patients at the end of May, against ten and six at the end of the two preceding months. The prevalence of scarlet fever showed a marked increase last month as compared with the two preceding months; among the various metropolitan boroughs this disease was proportionally most prevalent in Paddington, Hampstead, Hackney, Finsbury, and Bermondsey. The Metropolitan Asylums hospitals contained 2462 scarlet fever patients at the end of last month, against 2580, 2353, and 2192 at the end of the three preceding months; the weekly admissions averaged 321, against 271, 238, and 282 in the three preceding months. Diphtheria showed a slightly declining prevalence last month; the boroughs in which the numbers of notified cases were greatest in proportion to the several populations were Chelsea, Southwark, Bermondsey, Greenwich, and Woolwich. The number of diphtheria patients in the Metropolitan Asylums hospitals, which had been 926, 924, and 860 at the end of the three preceding months, had further declined to 760 at the end of last month; the weekly admissions averaged 98, against 116, 111, and 103 in the three preceding months. Enteric fever was rather less prevalent in May than in the preceding months of this year; the greatest proportional prevalence of this disease occurred in Hammersmith, Chelsea, Finsbury, the City of London, Wandsworth, and Deptford. There were 41 enteric fever patients under treatment in the Metropolitan Asylums hospitals at the end of last month, against 79, 65, and 56 at the end of the three preceding months; the weekly admissions averaged 12, against 11 in each of the three preceding months. Erysipelas was proportionally most prevalent in Hammersmith, Hackney, Southwark, Deptford, and Greenwich. The 28 cases of puerperal fever included

ANALYSIS OF SICKNESS AND MORTALITY STATISTICS IN LONDON DURING MAY, 1906.

(Specially compiled for THE LANCET.)

CITIES AND BOROUGHS.	Estimated population in the middle of 1906.	NOTIFIED CASES OF INFECTIOUS DISEASE.										DEATHS FROM PRINCIPAL INFECTIOUS DISEASES.										Deaths from all causes.	Death-rate per 1000 living.	Deaths of infants under one year to 1000 births.
		Small-pox.	Scarlet fever.	Diphtheria.*	Typhus fever.	Enteric fever.	Other continued fevers.	Puerperal fever.	Erysipelas.	Cholera.	Total.	Annual rate per 1000 persons living.	Small-pox.	Measles.	Scarlet fever.	Diphtheria.*	Whooping-cough.	Typhus fever.	Enteric fever.	Other continued fevers.	Diarrhœa.	Total.	Annual rate per 1000 persons living.			
LONDON...	4,721,217	6	1154	606	—	30	1	28	423	—	2898	6·4	—	270	65	53	168	—	15	—	74	644	1·4	6247	13·8	92
West Districts.																										
Paddington	146,913	—	70	10	—	3	—	2	10	—	95	6·7	—	2	1	—	1	—	2	—	—	6	0·4	153	10·7	84
Kensington	180,952	—	42	16	—	2	—	—	17	—	77	4·4	—	4	4	—	2	—	1	—	1	12	0·7	235	13·5	84
Hammersmith	120,679	—	50	19	—	4	—	1	14	—	88	7·6	—	10	3	—	2	—	1	—	2	18	1·6	171	14·8	128
Fulham	161,965	—	41	24	—	5	—	1	12	—	83	5·3	—	1	3	2	2	—	—	—	6	14	0·9	177	11·4	95
Chelsea	74,672	—	33	15	—	3	—	1	4	—	56	7·8	—	7	1	3	5	—	—	—	2	18	2·5	110	15·4	80
City of Westminster	173,906	—	69	13	—	2	—	1	12	—	97	5·8	—	2	2	—	4	—	—	—	2	10	0·6	201	12·1	84
North Districts.																										
St. Marylebone	128,580	—	50	10	—	—	—	—	7	—	67	5·4	—	3	—	1	1	—	—	—	2	7	0·6	166	13·5	51
Hampstead	89,633	—	46	6	—	2	—	1	10	—	65	7·6	—	5	—	3	—	—	—	—	1	9	1·0	80	9·3	68
St. Pancras	236,456	—	62	33	—	3	—	—	15	—	113	5·0	—	24	2	1	7	—	—	—	5	39	1·7	369	16·3	101
Islington	344,987	—	148	27	—	5	—	5	24	—	209	6·3	—	30	7	4	9	—	—	—	4	54	1·6	448	13·5	87
Stoke Newington	53,217	—	9	3	—	—	—	—	3	—	15	2·9	—	—	—	—	4	—	—	—	1	5	1·0	57	11·2	38
Hackney	230,721	1	107	38	—	6	1	3	27	—	183	8·3	—	15	3	4	5	—	2	—	2	31	1·4	272	12·3	86
Central Districts.																										
Holborn	55,805	—	12	3	—	—	—	—	6	—	21	3·9	—	5	—	—	2	—	1	—	3	11	2·1	99	18·5	74
Finsbury	97,466	—	45	15	—	6	—	1	8	—	75	8·0	—	34	4	3	12	—	3	—	2	58	6·2	205	21·9	131
City of London	21,367	—	6	3	—	1	—	—	—	—	10	4·9	—	—	2	—	—	—	—	—	—	2	1·0	35	17·1	107
East Districts.																										
Shoreditch	116,108	—	46	8	—	1	—	1	12	—	68	6·1	—	25	—	1	5	—	—	—	3	34	3·1	205	18·4	115
Bethnal Green	130,609	4	52	12	—	2	—	1	12	—	83	6·6	—	5	2	1	10	—	2	—	2	22	1·8	213	17·0	110
Stepney	307,176	—	125	47	—	3	—	—	26	—	201	6·8	—	11	4	6	11	—	1	—	4	37	1·3	432	14·7	88
Poplar	170,673	1	66	26	—	4	—	—	13	—	110	6·7	—	11	2	2	6	—	—	—	5	26	1·6	256	15·6	88
South Districts.																										
Southwark	209,143	—	78	36	—	2	—	1	27	—	144	7·2	—	21	3	2	8	—	—	—	1	35	1·7	326	16·3	121
Bermondsey	123,629	—	64	31	—	4	—	1	11	—	111	9·0	—	21	3	3	6	—	—	—	4	37	3·0	235	19·1	130
Lambeth	315,774	—	97	38	—	1	—	1	28	—	165	5·4	—	7	2	6	10	—	—	—	5	30	1·0	379	12·5	75
Battersea	179,622	—	71	21	—	1	—	2	20	—	115	6·7	—	3	3	—	11	—	—	—	4	21	1·2	199	11·6	76
Wandsworth	273,381	—	109	37	—	9	—	2	29	—	186	7·1	—	10	3	2	8	—	1	—	1	25	1·0	339	12·9	96
Camberwell	274,132	—	92	38	—	1	—	1	18	—	150	5·7	—	9	3	2	14	—	—	—	4	32	1·2	338	12·9	91
Deptford	115,495	—	40	14	—	7	—	1	13	—	75	6·8	—	1	3	1	10	—	1	—	5	21	1·9	139	12·6	101
Greenwich	105,350	—	36	21	—	1	—	1	18	—	77	7·6	—	3	1	2	7	—	—	—	—	13	1·3	115	11·4	69
Lewisham	148,463	—	48	16	—	—	—	—	16	—	80	5·6	—	1	3	—	4	—	—	—	2	10	0·7	147	10·3	90
Woolwich	127,345	—	39	26	—	2	—	—	11	—	78	6·4	—	—	1	3	2	—	—	—	1	7	0·6	146	12·0	88
Port of London	—	—	1	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

* Including membranous croup.

five belonging to Islington, three to Hackney, and two each to Paddington, Battersea, and Wandsworth.

The mortality statistics in the table relate to the deaths of persons actually belonging to the various boroughs, the deaths occurring in public institutions having been distributed among the boroughs in which the deceased persons had previously resided. During the five weeks ending June 2nd 6247 deaths of persons belonging to London were registered, equal to an annual rate of 13·8 per 1000 of the population; in the three preceding months the rates had been 15·9, 16·2, and 17·0 per 1000. The death-rates last month ranged from 9·3 in Hampstead, 10·3 in Lewisham, 10·7 in Paddington, 11·2 in Stoke Newington, and 11·4 in Fulham and in Greenwich, to 17·0 in Bethnal Green, 17·1 in the City of London, 18·4 in Shoreditch, 18·5 in Holborn, 19·1 in Bermondsey, and 21·9 in Finsbury. The 6247 deaths from all causes in London last month included 644 which were referred to the principal infectious diseases; of these, 270 resulted from measles, 65 from scarlet fever, 52 from diphtheria, 168 from whooping-cough, 15 from enteric fever, and 74 from diarrhœa. The lowest death-rates from these diseases were recorded in Paddington, Kensington, City of Westminster, St. Marylebone, Lewisham, and Woolwich; and the highest rates in Chelsea, Holborn, Finsbury, Shoreditch, and Bermondsey. The 270 deaths from measles were 31 below the corrected average number in the corresponding periods of the four preceding years; this disease was proportionally most fatal in Chelsea, St. Pancras, Islington, Holborn, Finsbury, Shoreditch, Southwark, and Bermondsey. The 65 fatal cases of scarlet fever were 25 in excess of the average; the greatest proportional mortality from this disease occurred in Kensington, Hammersmith, Finsbury, City of London, Bermondsey, and Deptford. The 52 deaths from diphtheria were 19 fewer than the corrected average number; among the various metropolitan boroughs diphtheria was proportionally most fatal in Chelsea, Hampstead, Finsbury, Stepney, Bermondsey, and Woolwich. The 168 fatal cases of whooping-cough showed a decline of 32 from the corrected average number; the highest death-rates from this disease were recorded in Stoke Newington, Finsbury, Bethnal Green, Deptford, and Greenwich. The 15 deaths from "fever" were four below the average for the corresponding periods of the four preceding years; of these 15 deaths three belonged to Finsbury and two each to Paddington, Hackney, and Bethnal Green. The 74 fatal cases of diarrhœa showed a decline of ten from the corrected average number; among the various metropolitan boroughs this disease was proportionally most fatal in Fulham, St. Pancras, Holborn, Poplar, Bermondsey, and Deptford. In conclusion, it may be stated that the aggregate mortality in London last month from the principal infectious diseases was nearly 16 per cent. below the average.

Infant mortality, measured by the proportion of deaths among children under one year of age to registered births, was equal to 92 per 1000. The lowest rates of infant mortality were recorded in St. Marylebone, Hampstead, Stoke Newington, Holborn, Lambeth, Battersea, and Greenwich; and the highest rates in Hammersmith, Finsbury, Shoreditch, Bethnal Green, Southwark, and Bermondsey.

THE SERVICES.

ROYAL NAVY MEDICAL SERVICE.

THE following appointments are notified:—Fleet Surgeon R. T. A. Levinge, to the *Russell*, lent. Surgeons: P. T. Sutcliffe to the *Sirius*, lent for manœuvres; and D. G. Addison-Scott lent to the *Hussar*, temporary, while on fishery duties.

ARMY MEDICAL SERVICE.

Lieutenant-Colonel James M. Irwin, Royal Army Medical Corps, to be Assistant Director-General, vice Lieutenant-Colonel W. Babtie, V.C., C.M.G., Royal Army Medical Corps, whose tenure of that appointment has expired (dated June 1st, 1906). Lieutenant-Colonel Babtie has joined at Woolwich.

ROYAL ARMY MEDICAL CORPS.

Lieutenant C. G. Browne, from the Seconded List, to be Lieutenant. Major G. A. Wade has left Portland. Captain A. E. Hamerton, on return from Ferozepore, is appointed to the London district.

INDIAN MEDICAL SERVICE.

Bengal: To be Colonel: Lieutenant-Colonel P. A. Weir. Majors to be Lieutenant-Colonels: P. Hehir, L. J. Pisani, W. R. Edwards, C.M.G., C. Mactaggart, G. J. H. Bell, J. T. Daly, H. Fooks, E. Hudson, A. W. Dawson, and W. H. B. Robinson. Captains to be Majors: G. Lamb, H. Burden, C. H. Bowle-Evans, J. Fisher, D.S.O., E. S. Peck, S. A. Harriss, E. C. MacLeod, C. Thomson, D. W. Sutherland, and W. Selby, D.S.O.

The King has approved of the retirement from the service of the undermentioned officers: Lieutenant-Colonel H. C. Banerji, Lieutenant-Colonel K. A. Dalal, and Major J. O. Pinto.

ARMY MEDICAL REFORM: RECENT CORRESPONDENCE.

No one at all acquainted with the extent and gravity of the subject would be disposed to underrate the great value and importance of Mr. St. John Brodrick's communication on "Medical Science and Military Strength" which appeared in the *Times* of June 6th and to which attention was called in an annotation in THE LANCET of last week, or of that from Sir Frederick Treves which followed it in the *Times* of June 8th. It is needless to tell our readers that we hail with extreme satisfaction the publication of their testimony in favour of views and principles which, speaking generally, we have done our best to maintain and to advocate for many years past in what we deemed to be the interests of the public service as a whole and not merely in the interest of the Army Medical Service in particular.

THE ARMY ESTIMATES.

No time was lost on the reassembling of Parliament last week after the Whitsuntide holidays. The House at once went into committee of supply on the army estimates. A great deal of ground was covered in the discussion which, notwithstanding that it was of a very discursive nature, was nevertheless in many respects interesting and enlightening. It is needless, and would indeed be impossible, to refer to all the points and criticisms raised but we may touch upon a few possessing medical or sanitary interest.

ARMY REDUCTIONS.

It appears to be understood that Mr. Haldane is bound to make some considerable reductions in the Army and so far as is known these will be in the infantry and artillery. Nothing has been said about the Army Medical Service in this respect.

BARRACK CONSTRUCTION: WORKS AND BUILDINGS GENERALLY.

It is needless to say that the health, comfort, and convenience of the soldier, as well as the popularity of the army service, are greatly influenced by the way in which troops are lodged and provided for. Many great and radical changes have been introduced into the army of late years. The systems and methods of procedure in regard to the whole subject of barrack construction have been revised and altered. A new department of the War Office has been created. The work of the supervision of construction of barracks has been transferred to a civilian member of the War Office but, as Mr. Haldane tells us, it is too soon yet to say how the change will work. And the War Minister added his opinion that the main cause of the extravagance on barrack construction in the past was due to the constant changes of policy. If they wanted to have the work cheaply done they must fix upon some policy and stick to it and give up chopping and changing. Until they got that fixed policy it did not matter whether they changed from engineers to civilians, or from civilians back to engineers, they would have the same flood of expense in the future as in the past.

THE LATE MINISTER FOR WAR ON OLD BARRACKS AND ON THE BUILDINGS USED FOR RECRUITING.

Mr. Arnold-Forster, if he contributed nothing particularly new to the discussion, nevertheless said much that was admittedly true. Barracks were put on sites 100 years ago and less which had now become most unsuitable and many of the barracks were to-day quite obsolete and most insanitary. He adverted to the prejudicial effect which such buildings and those provided for recruiting had on the interests of the army. We are entirely in accord with what he had to say in condemnation of the central recruiting station in St. George's-square as quite unworthy of being the

principal entrance to the British army. Army medical officers have much to do with the inspection of recruits and consequently know a good deal about them. We have long held that our recruiting arrangements in respect of all buildings used for that purpose require to be greatly altered and improved. Hitherto no Government seems to have gone the right way to work in order to attract the number and quality of the recruits required for the army.

BARRACK ACCOMMODATION: MALTA.

The insanitary condition and unhealthiness of Malta as a military station were urged by Mr. Cobbold as reasons for reducing the strength of that garrison instead of increasing it. The more troops the War Office puts at Malta the more congested and the worse the place would become and the number already there should be reduced. Mr. Haldane, while recognising the force of these observations and their bearing upon what is to be our future military policy, thought it better to defer the consideration of them until he made his general statement on that subject early in July next.

INSPECTION OF THE PLYMOUTH GARRISON.

Surgeon-General W. S. Pratt, R.A.M.C., Principal Medical Officer of the Southern Command, has been on a tour of inspection in Plymouth Garrison. Surgeon-General Pratt, who was conducted by Colonel G. D. Bourke, R.A.M.C., Principal Administrative Officer, visited all the departments, including the Station Hospital, Stoke, and the outlying stations.

PHYSICAL DEVELOPMENT OF SOLDIERS.

It is proposed to supply dumb-bells to the Royal Horse and Field Artillery at stations where there are no gymnasia to develop the physical strength of the men.

THE PRESERVED MEAT SCANDAL IN AMERICA.

This subject was incidentally referred to by Mr. Haldane who stated the measures that had been adopted by the War Department for the protection of the troops.

Correspondence.

"Audi alteram partem."

THE METROPOLITAN HOSPITAL SUNDAY FUND.

To the Editors of THE LANCET.

SIRS,—The thirty-fourth anniversary of the Hospital Sunday Fund will be observed next Sunday, and as its President and Treasurer for the year I desire, by your courtesy, to invite the attention of the public to the immediate needs of the voluntarily supported charities of the metropolis. Over 2000 places of worship will on that day unite in contributing their offerings and a supplemental collection is being raised in the City of London.

Mr. George Herring will, with his customary munificence, add one-fourth to the amount collected up to a gift of £25 000.

The needs and merits of the 162 institutions and 60 dispensaries are carefully considered by the distribution committee, and, for the first time, awards will be made to district nursing associations in the metropolis employing fully trained hospital nurses. The money is contributed for the maintenance of patients only and not for building purposes. None of it will go to the medical schools.

Awards to the amount of £71,000 were made last year. Is it too much to ask that increased help should be given so that £100,000 can now be distributed? I shall be glad to receive at the Mansion House any contributions from those unable to attend a place of worship on Hospital Sunday.

I am, Sirs, your obedient servant,

W. VAUGHAN MORGAN,
Lord Mayor.

Mansion House, London, E.C., June 13th, 1906.

THE CRUSADE AGAINST TUBERCULOSIS.

To the Editors of THE LANCET.

SIRS,—In your leading article in THE LANCET of June 2nd, p. 1544, dealing with this subject you call attention to Professor Robert Koch's interesting Nobel lecture and enumerate the measures which have been taken in Germany and other countries against the disease; such as its notification, the free examination of sputum for the bacillus, the provision of hospitals and sanatoriums, and the supervision of patients in their own homes by means of dispensaries similar to those established in France by Calmette. He also adverts to the education of the public in the means of avoiding infection and, finally, points out the great aid that might be given by the State "in bettering unfavourable domiciliary conditions."

I venture to think, however, that perhaps the most important portions of the discourse are to be found in its preamble, in which he discusses "the manner in which infection in tuberculosis takes place." In this he dismisses in a few words the possibility of infection by tubercle bacilli contained in the flesh and milk of tuberculous cattle. He makes the startling announcement that "the harmlessness of the bovine tuberculosis to man has been directly proved by the repeated inoculating of human beings with the material of bovine tuberculosis." This statement will be accepted with some reserve and may be commended to the notice of British pathologists and others. The next point upon which he touched is, I think, of even greater importance. Thus, whilst rightly insisting upon the infectious character of "open" tuberculosis, he now points out that the infectiveness of tubercle is, to a great extent, conditional upon environment; and, he might have added, but does not, upon the degree of bodily resistance. I have long ago insisted upon this limitation of the power of infection by tubercle (see a paper, published in 1884 by Cornish, Manchester, "On the Limits of the Infectiveness of Tubercle"), and I have ventured to base upon it numerous appeals to the State, to local authorities, and to the public to remove the conditions under which infection by tubercle becomes possible. It is therefore no small satisfaction to me to be able to claim on this point the powerful aid of Professor Koch, and to quote his words. Thus, he says:—

> Among patients with open tuberculosis, distinctions are to be made as regards the degree of dangerousness to be ascribed to them. It is matter of common observation that such patients live for years in their families without infecting anyone. In hospitals for pulmonary phthisis it is, in certain circumstances, possible that no cases of infection occur among the attendants or, at any rate, so few that, in former times, it was thought necessary to regard this as proof of the non-contagiousness of tuberculosis.

He then gives the reasons for this apparent non-contagiousness:—

> It then appears that the patients in question are people who are very cautious about their sputum, see to the cleanliness of their dwellings and clothing, and live in copiously aired and lighted rooms, so that the germs that get into the air can be swiftly swept away by the current or killed by the light. If these conditions are not fulfilled, there is no lack of infection, even in hospitals and the dwellings of the well to-do, as experience teaches daily.
>
> And it becomes the more frequent the more uncleanly the patients are as regards their sputum, the more lack there is of air and light, and the more closely crowded together the sick live with the hale.
>
> This kind of infection has struck attentive observers as so important that tuberculosis has been frankly and justly called a dwelling disease.

He sums up by saying:—

> Patients with closed tuberculosis are to be regarded as quite harmless. Even those who suffer from open tuberculosis are harmless so long as the tubercle bacilli expelled by them are prevented by cleanliness, airing, &c., from infecting. The patient becomes dangerous only when he is personally uncleanly, or becomes so helpless in consequence of the far-advanced disease that he can no longer see to the suitable removal of the sputa. For the healthy the danger of infection increases with the impossibility of avoiding the immediate neighbourhood of a dangerous patient—i.e., in densely inhabited rooms, and quite specially if the latter are not only overcrowded but also badly ventilated and inadequately lighted.

The case could hardly be better put. These words, coming as they do from so high an authority, will tend to mitigate the present unreasoning scare of infection from anyone even suspected of being consumptive and they will stimulate to further exertions those who are urging forward all measures of sanitary reform.

In some of his earlier addresses at the outset of the campaign against consumption instituted by the National Association, Sir James Crichton-Browne used the alliterative phrase, "the seed, the soil, and the surroundings" to denote the chief causes of infection by tubercle. No one now doubts the potency of the essential cause, the "seed," but in our efforts to attack the disease at its root we have been too prone to forget Dr. Addison's remark with respect to other infectious diseases: "One blade of the destroying shears is forged at home; without it the other cannot do its work." There has been a tendency to neglect the soil and the surroundings. When we have put into force all the very necessary means of directly attacking the specific bacillus

there will still remain many sources of the disease which will escape our net, and to meet these the only measure that can be used are those forms of general sanitary reform which have already in England brought about so large a diminution in the extent of the scourge—two-thirds at least in the last 66 years. Since Professor Koch's recent pronouncement we may hope that these also will receive their due proportion of attention.

I am, Sirs, yours faithfully,

Bournemouth, June 3rd, 1906. ARTHUR RANSOME.

CARBOHYDRATE METABOLISM AND DIABETES.

To the Editors of THE LANCET.

SIRS,—Whilst appreciating the tone in which your reviewer has dealt with my recently published work on "Carbohydrate Metabolism and Diabetes," I feel that I ought to direct attention to a misinterpretation that occurs with reference to a fundamental physiological point. "Normally," the review runs, "such material [absorbed carbohydrate] is taken up by the cells of the intestinal villi and then disappears from view. The mechanism by which this phenomenon occurs is as follows. The epithelium of the villi assimilates the sugar present in the intestine and converts it into its own protoplasm. We have here not a passive process of osmosis but a vital assimilative action. The epithelial cells then re-excrete the carbohydrate material into the cavity of the villi and there it is taken up by the lymphocytes which abound in this position and is again assimilated, that is to say, it becomes an integral part of the living substance of the lymphocytes just as it did of the epithelial cells." Nowhere do I suggest that the epithelial cells perform the function that is here assigned to them. I speak of them as assimilative agents of carbohydrate into fat and give photomicrographs in support of the view. This may have started the idea of their being concerned in the assimilation of carbohydrate into proteid but no mention is anywhere made of such being the case. The view advocated, and in several places expressed, is that both peptone and sugar, diffusible products of digestion, are appropriated by the bioplasm of the lymphocytes and thus conveyed in a combined state under the form of living matter into the blood. At p. 60, for instance, after speaking of the appropriation of peptone by the growing lymphocytes, I proceed: "I have to suggest that the action should be extended and made to embrace carbohydrate—that carbohydrate and peptone stand upon the same footing as regards the manner in which they are dealt with by the growing bioplasm of the intestinal lymphocytes—that both become linked on to the biogenic molecules of the lymphocytes and thus made to enter into the constitution of living matter." Again, at p. 73, I state: "To the lymphoid cells, then, of the villi I assign the office of metabolising carbohydrate into proteid, and to the epithelial cells that of metabolising it into fat."

I am, Sirs, yours faithfully,

Grosvenor-street, W., June 12th, 1906. F. W. PAVY.

THE TREATMENT OF INFANTILE DIARRHŒA.

To the Editors of THE LANCET.

SIRS,—Dr. William Ayres of Brierley Hill writes on this subject in your issue of June 2nd, p. 1567. I should like to ask if he adopts the preliminary saline or other purge as a routine practice? So many infants are at "death's door" when first seen that I always make it a point to stop the diarrhœa before it stops the patient. Of course it was the late Sir George Johnson who originated the purgative line of treatment in diarrhœa and one does not care to challenge so high an authority. I think castor oil was his favourite. I am glad to say the oil has fallen into desuetude, but "I ha'e my doots" about any kind of purge, if purging has been going on for a day or two. "Arsenite of copper" seems a powerful remedy for an infant. Sodium bicarbonate, bismuth, and opium with peppermint water are safer and equally efficacious. But the remedy *par excellence* is hydrargyrum cum creta and Dover's powder, as the liver in all these cases is grievously affected and the absence of bile causes the fœtid, putrid stools. The sulphocarbolates and salicylates are useful as disinfectants but nothing further. Dr. Ayres does not mention stimulants. I consider brandy in bowel complaint a *sine quâ non*—infants take it well and water arrowroot is the food of foods. No milk, of course, as the disease is known across the herring pond as milk fever. I have never used the hypodermic syringe in the case of an infant and seldom lose a case of diarrhœa unless it is complicated with tuberculosis.

I am, Sirs, yours faithfully,

Liverpool, June 4th, 1906. A. McC. WEIR, M.D. R.U.I.

THE KINEMATOGRAPH IN MEDICINE.

To the Editors of THE LANCET.

SIRS,—In connexion with the report of Dr. W. G. Chase's demonstration before the Edinburgh Medico-Chirurgical Society (see THE LANCET, May 26th, p. 1472) of the use of the kinematograph in medicine it may be of interest to note that so far back as 1897 a demonstration of similar character was given to the Glasgow Medico-Chirurgical Society by Dr. Donald Mackintosh, the medical superintendent of the Glasgow Western Infirmary. Whether this was reported in the medical press or not I cannot say but a brief account of it appears in Volume I. of the Society's Transactions.

I am, Sirs, yours faithfully,

Harley-street, W., May 30th, 1906. C. O. HAWTHORNE.

THE USE OF RUBBER GLOVES IN MEDICAL WARDS.

To the Editors of THE LANCET.

SIRS,—From the general drift of the excellent paper by Dr. T. W. Clarke in your issue of June 2nd it would appear that he regards the use of rubber gloves in medical wards as an innovation, at all events in this country. I should like, therefore, to point out that they were in routine use by the nurses of this hospital in the year 1903. In the wards for enteric fever they are worn whenever the bedclothes or utensils of the patient are handled, as well as during the treatment of the mouths. Similarly they are employed during the irrigation of the throats in the scarlet fever and diphtheria wards and for the manipulations attending the treatment of those suffering from puerperal fever and erysipelas.

I do not, of course, wish to raise any question of priority in this matter as the credit must in any case rest with the surgeons who had previously invented them but I may mention that I alluded to the use of these gloves by the nurses in my annual report for 1903, which is incorporated with that of the medical officer of health of this city.

I am, Sirs, yours faithfully,

A. KNYVETT GORDON, M.B. Cantab.,
Medical Superintendent of the Monsall Hospital, Manchester.

June 9th, 1906.

MANUFACTURE AND SUPPLY OF ELECTROLYTIC DISINFECTANT BY THE PUBLIC HEALTH AUTHORITY.

To the Editors of THE LANCET.

SIRS,—I have read with considerable interest the article on the above subject in THE LANCET of March 24th, p. 852, and also Mr. F. W. Alexander's letter in your issue of April 14th, p. 1070, on the cost of production of the solution. I regret that you have treated this question from the chemical standpoint only, as to my mind information of great value would have been obtained by bacteriological methods which would have shown the value of the "hermite" in the absence and presence of organic matter. Chlorine and the hypochlorites have a very high germicidal value under the first-mentioned conditions but they are rendered valueless by the presence of even moderate amounts of organic matter. Sommerville and Walker[1] have demonstrated this in the case of hermite, the addition of an equal volume of urine to the solution destroying its bactericidal power absolutely.

I have been recently working with a well-known hypochlorite solution containing ten parts of available chlorine and as the composition of the fluid is so nearly allied to

[1] Public Health, February, 1906.

hermite my results may be of interest. They are as under:—

TABLE I.

Sample.	Dilution.	Time culture exposed to action of disinfectant. Minutes.						Subcultures.	
		2½	5	7½	10	12½	15	Period of incubation.	Temperature.
Hypochlorite	1 : 2340	–	–	–	–	–	–	72 hours.	37·5° C.
,,	1 : 2470	–	–	–	–	–	–		
,,	1 : 2600	×	–	–	–	–	–		
,,	1 : 2730	×	×	–	–	–	–		
Carbolic acid...	1 : 130	×	×	–	–	–	–		

× means growth. – means no growth.

Table I. shows the effect of dilution when compared with carbolic acid in the absence of organic matter. The co-efficient is 21, the test organism used was bacillus typhosus, and the method that of Rideal and Walker.

TABLE II.

Sample.	Dilution.	Time culture exposed to action of disinfectant. Minutes.						Subcultures.	
		2½	5	7½	10	12½	15	Period of incubation.	Temperature.
1% hypochlorite solution	1 : 2	×	–	–	–	–	–	72 hours.	37·5° C.
,,	1 : 3	×	×	×	×	×	×		
,,	1 : 4	×	×	×	×	×	×		
,,	1 : 5	×	×	×	×	×	×		
Carbolic acid ...	1 : 110	×	×	–	–	–	–		

It will be seen by Table II. that a 1 per cent. solution of the hypochlorite when mixed with even two parts of urine has no disinfecting power, the co-efficient having dropped from 21 to *nil*. The results are very striking and show that in practice disinfection with chlorine and hypochlorites is not safe owing to the liability of breakdown even in the presence of a comparatively small volume of organic matter. The cost of production of the hermite, though apparently small, gives it no advantage (even assuming its efficiency) over some of the more powerful germicides now on the market, as they can be used for general disinfection in comparatively high dilutions. This is a point which deserves consideration at the hands of public health authorities, as at a first glance the cost of hermite appears to be really very trifling. I am, Sirs, yours faithfully,

T. H. LLOYD, F.C.S.
Member of the Society of Public Analysts, &c.

Newark, June 9th, 1906.

*** Mr. Lloyd will find quoted in the article referred to the following excerpt taken from the report of THE LANCET Analytical Sanitary Commission on the Hermite Process of Sewage Treatment by Electricity, published in THE LANCET of May 26th, 1894, p. 1321: "The electrolysed sea water or our 'artificial' Hermite solution appears, indeed, while exerting a specific action on the organisms, at the same time to be used up and destroyed to a much less extent by the organic matter present than any other disinfectant with which we are at present acquainted."—ED. L.

THE TREATMENT OF ASCITES.

To the Editors of THE LANCET.

SIRS,—I have read with interest Dr. Robert Knox's letter on the above subject in your issue of June 9th, p. 1639, and have to thank him for his courteous reference to my practice in the cases discussed. His own ingenious method of maintaining pressure over the abdomen by inflating a large india-rubber pad under a resisting surface is a distinct advance on any previous appliance. That this method should replace all the more "heroic" measures of the surgeon other than paracentesis in these cases may, I think, be reasonably expected. We must, of course, bear in mind all the factors in each case treated. The ascites may be one of the least important, though an aggravating incident in the clinical history and if exalted to the leading rôle while the real key to the situation is neglected or injudiciously treated the result may be disastrous. My object, however, in writing these few lines is less to dwell upon these points than to disclaim the implied originality which Dr. Knox very kindly ascribes to me. I have merely called attention afresh to a valuable procedure long known and practised.

To Richard Mead, of learned and graceful memory, so far as I know, we are indebted for having first used abdominal pressure efficiently during and after paracentesis ("Medical Works," 1762, p. 518). Mead, as we know, was one of the physicians to St. Thomas's Hospital, and Cheselden, too, also one of the glories of that school, dealt instructively with the subject. By a coincidence interesting to myself it was also a surgeon of St. Thomas's—the late Mr. John Croft—whom I first saw use with success the method of continuous and efficient strapping after tapping in a case of ascites which had repeatedly recurred after tapping without any further subsequent abdominal pressure being employed than the usual perfunctory bandaging.

I am, Sirs, yours faithfully,
ALEXANDER MORISON.

Upper Berkeley-street, W., June 9th, 1906.

VOYAGES D'ÉTUDES MÉDICALES.

To the Editors of THE LANCET.

SIRS,—As the full details of this year's trip to the French health resorts are now available will you allow me to point out in your columns that the conditions of these voyages have undergone a change. The number of those taking part in last year's visit to the Pyrenees was 150—that is, nearly 50 more than on any previous occasion. This number taxed the resources of the management very severely. A sudden invasion by 150 people of a small station like St. Sauveur or of such a place as Biarritz in the height of its flower carnival season is calculated to give rise to difficulties which could not have been foreseen. There was in consequence some not altogether unreasonable grumbling. To obviate this in the future the number of those taking part in these voyages is to be severely limited to 100. These 100 places have been divided up amongst the various countries and the number available for Great Britain is 20. Of these 20 places a great many are already bespoken, so that if any of your readers should contemplate taking part in this year's excursion I shall be much obliged if they will communicate with me as soon as possible. I am, Sirs, yours faithfully,

LEONARD WILLIAMS.

8, York-street, Portman-square, W., June 13th, 1906.

THE GENERAL MEDICAL COUNCIL ELECTION.

To the Editors of THE LANCET.

SIRS,—Will you permit me, as a nominated candidate for election as a Direct Representative upon the General Medical Council, to reply to several correspondents who wish to know my views on three points which being of general interest I may claim the wide publicity of your columns.

1. As to whether I have any suggestions concerning the education of the medical student before registration? My answer is that as the education of all classes in the country has advanced so rapidly during recent years and no proportionate demands have been made on students before registering I am of opinion that we must demand that at the very least they shall possess a degree in arts or science. I give this option for the present in order that those who will eventually become members of the profession shall not have been trained in a too fixed and cast iron groove, and so that both arts and science men may be attracted to its ranks. There are openings for both and it would serve to enrich the *personnel* of its membership and would help to stimulate a friendly rivalry between these two cultured classes. We should have the pure scientist who has taken the science degree and he, of course, would be the man to go in more fully for his own department. On the other hand, the arts graduate would not be debarred, of course, from developing the scientific element but would be more equipped to maintain the more general erudite element of the profession. By this means we should not only get a better class of men throughout the profession but it would be a very effectual means of eliminating undesirables from its ranks. Those who have no real taste for learning and culture for its own sake would have to seek occupation elsewhere. The teachers at the schools of medicine would have better material to deal with and we might expect a more elevated tone throughout. Another advantage would be that there would be fewer students registered each year, but this would be no great drawback. Enough would join for many years to come until the supply was more on a par with the demand than is the case at present or has been for many years. Rather than adopting the one-portal

system just now I would endeavour by these means to improve the present one.

2. That in lieu of the benefits which students derived in former days from the apprenticeship system with respect to etiquette, medical students in each of their last two sessions should be compelled to attend at least three lectures on medical ethics.

3. An expression of opinion has been asked for as to canvassing for public vaccination cases on the part of either medical officers or other Poor-law officers on their behalf. I hold strongly that it should be regarded by the Council as "infamous conduct in a professional respect" and would advocate as stringent punishment as upon those in humbler spheres of the profession.

Since writing the above I have been pleased to see that the University of Wales insists on either a degree in arts or science from medical students.

I am, Sirs, yours faithfully,

Manchester, June 9th, 1906. G. H. BROADBENT.

APPLICATION OF HARROGATE SULPHUR WATER IN CHRONIC CONSTIPATION BY THE PLOMBIÈRES METHOD.

To the Editors of THE LANCET.

SIRS,—The patient in the following case was a man, 19 years of age, measuring 5 feet 10 inches in height and weighing 12 stones 4 pounds. The girth of his chest was 44 inches and that of his biceps was 15 inches. He was a splendidly built athlete in a good position. He enjoyed usual good health until four years ago, at which time his bowels began to act irregularly and it became necessary for him to take gradually increasing doses of aperient medicine. Simple liquorice was used at first but his constipation became more marked until no effect was produced by even the strongest cathartics and rectal injections and it was a common occurrence for him to go for 14 days without having a stool, although passing quantities of flatus. He was placed in a nursing home without benefit, surgical exploration was discussed, decided on, and abandoned, and as a last resource he was sent to Harrogate. On arrival he was haggard, covered in many parts with unhealthy looking papules, and confessed to having had no evacuations for 11 days. He was on the following morning given five grains of calomel and 32 ounces of strong sulphur water hot without effect; though followed by dry massage for half an hour and for three subsequent days this treatment had no effect. On the fifth day he was ordered a Plombières bath of sulphur water at a temperature of 99° F. with a submersive douche at a temperature of 110° and two injections each consisting of 30 ounces of strong sulphur water at a temperature of 103°. The effluent revealed a small quantity of fæcal débris. The following morning he again took two quantities of 16 ounces of strong sulphur water but without effect and without any unpleasant consequences and in the afternoon he had another "Plombières," this time with two 50-ounce injections. In the effluent there was a quantity of tenacious membrane, pure mucus, and next morning the waters had a slight effect. Two more baths resulted in further quantities of mucus being released and after the fifth bath a number of casts, one of which was six inches in length, were brought away. Since then the waters have begun to produce a satisfactory effect and the baths have brought away further quantities of mucus, his skin and general appearance have both improved, and he feels better. He showed me several prescriptions containing nux vomica, belladonna, &c., of which he appears to have taken a considerable amount without avail.—I am, Sirs, yours faithfully,

HARRY CLOUGH, L.S.A.,
Physician to the Starbeck Convalescent Home, Harrogate.
June 9th, 1906.

THE SUTURE OF INCISIONS OF THE ABDOMINAL WALL IN LAYERS WITHOUT BURIED SUTURES.

To the Editors of THE LANCET.

SIRS,—Mr. J. B. Pike's contribution in your issue of April 7th is interesting, because this identical suture was introduced into Adelaide by Dr. W. Ramsay Smith of that city upwards of three years ago. I was present when he demonstrated it to several surgeons and anatomists. He employed it first in a case of femoral hernia in a woman under my charge; and at the operation we agreed to call it the "Wilson suture." Since then it has been used in all sorts of cases and has given great satisfaction. On a recent double ovariotomy the sutures were removed on the sixth day. Dr. Ramsay Smith had prepared a description and drawings of the suture for publication and spoke to Dr. Nicholas Senn of Chicago about it when he was here. Dr. Senn said that the suture was not new but was described by him in a book he had edited. Professor A. Watson, of the University of Adelaide, also said he thought that he had seen a somewhat similar suture used by an Irish surgeon in the Boer war.—I am, Sirs, yours faithfully,

R. S. ROGERS, M.A., M.D. Edin.,
Honorary Physician to the Adelaide Hospital.
Adelaide, South Australia, May 9th, 1906.

THE SUFFICIENCY OF DEATH CERTIFICATES: CEREBRAL HÆMORRHAGE AS A "PRIMARY CAUSE."

To the Editors of THE LANCET.

SIRS,—Some of your readers may be surprised to learn that in the year 1904 no fewer than 14,000 persons belonging to England and Wales were buried without further inquiry on the strength of certificates in which the sole primary cause assigned was "cerebral hæmorrhage." They comprised rather more females than males. In April of the present year a medical friend of my own, who five years ago had come into possession of a large property under very peculiar circumstances, was found on the floor of one of the lavatories of the house (in which he then dwelt) in a state of collapse, quite unconscious, and, as I have been informed by the person who found him, "waxy white." The same informant said there had been a free action of the bowels but that the fall occurred soon after the erect posture was resumed and that vomiting occurred after the fall; in fact, that the patient would seem to have been in the act of rushing to the basin to vomit there but fell before reaching it. My friend was a bachelor, and 70 years of age, and had long been in the habit of taking a small dose of cascara at night. At 7 A.M. he would have his "first breakfast," consisting of a cup of China tea and two thin slices of bread-and-butter. This would generally suffice to send him to the lavatory, but if not he would give directions for a small dose of Sprüdel salts to be dissolved and take this. On the morning in question such seems to have been the case, for the "call of nature" came in the middle of his second breakfast and he left an egg only just begun. I mention this to show that the nerve disturbance began peripherally and not centrally. It is true that when the patient was raised and placed in a chair, a general trembling came on, as in apoplexy. But shortly before his death, which supervened in 16 hours, he drew up both his legs. Beyond slight moaning he gave no sign of consciousness from the time he was found. If apoplectic, it was the first stroke. He had not complained of headache but was singing in seemingly good spirits whilst dressing and all went well until his "second breakfast."

He had promised me that he would send for me whenever seriously ill but evidently he had not expected a seizure of this kind and therefore had not made his wishes in this respect known to those about him, thinking there would be time and ability to do so when the occasion arose. But I was at once informed by letter of his death and in reply wired to say I should arrive on the evening prior to the funeral. Even so, however, I was too late to view the body, the coffin having been screwed down shortly before I reached the house. Three medical men attended the patient and they are said to have concurred in the diagnosis as set forth in the certificate—"Primary cause, cerebral hæmorrhage; secondary ditto, coma."

For my own part I should have been better satisfied if there had been a post-mortem examination absolutely to demonstrate the validity of this opinion, especially as there were no sorrowing relatives on the spot to have their feelings harrowed by the performance. I became acutely sensible of this desire when after the funeral one of the three medical men, speaking of the deceased, said to me, "His arteries were in perfect order, his pulse was soft and elastic," thus agreeing with what would have been my own judgment regarding my friend (of 46 years' standing), who was extremely simple in his ways, of spare habit, and abstemious to a degree. I heard from him less than a fortnight before his death and I beg to inclose the envelope which held his

last letter to me, together with another written by the same hand three and three-quarters years before (but taken at random) in order that you may judge whether there is any sign of failing power observable on a comparison of the two. In conclusion, I beg to object to the acceptance of a death certificate which assigns "cerebral hæmorrhage" as a primary cause in the absence of any declaration that there has been a post-mortem examination demonstrating the fact.

I am, Sirs, yours faithfully,

Kingston-on-Thames, May 22nd, 1906. D. BIDDLE.

*** The handwritings on the envelopes inclosed show no differences.—ED. L.

A POINT FOR THE SECRETARIES OF HOSPITALS.

To the Editors of THE LANCET.

SIRS,—Those responsible for the finances of hospitals and other institutions dependent on charity devote much energy and not a little expense to appeals to the public. May I beg for space in your columns to urge that the appeal lists of all such institutions should be scrutinised occasionally and useless labour and expense thereby avoided. More than ten years ago I took the house in which I live from the widow of a well-known man who had then been dead for several years. He had been a subscriber to one of the large London hospitals and to many other charitable institutions. The hospital in question and several other charities still send their annual reports and all their appeals to this house addressed to the dead man! These facts indicate some want of care by the authorities of these institutions in keeping their lists up to date. I give one instance, but it is unlikely to be unique.

I am, Sirs, yours faithfully,

June 10th, 1906. MARYLEBONE.

COIMBRA.

THE ANCIENT UNIVERSITY TOWN OF PORTUGAL.

(FROM OUR SPECIAL SANITARY COMMISSIONER.)

Portugal, May, 1906.

FROM Bussaco it is a very short journey to the neighbouring and old university city of Coimbra. Most persons who go to Bussaco also devote a day to visiting this quaint place. It is but a little town built on a steep hill with the University situated on the summit. All is ancient except the public services and these latter afford a strange contrast by reason of their modern character. Indeed, the municipality of Coimbra is evidently determined to be well abreast of the times. While the University students study and theorise the city fathers endeavour to act and this in a practical manner. Thus the municipality has recently succeeded in obtaining possession of the gasworks and about ten years ago it municipalised the waterworks. Formerly the inhabitants had to depend on private companies for both their gas and their water. Now that these services belong to the community the municipality gives the workers engaged thereon the eight hours' day and is endeavouring to organise a fund to provide old-age pensions. The water is taken from the earth under the river. It is filtered river water, but it is twice filtered, once naturally and once artificially. The water is collected at a depth of six metres below the bottom of the river and of nine metres below the usual or average surface of the river. Thus the water is filtered by the earth of the bed of the river. Then it is pumped up to different reservoirs placed in various positions, whence corresponding parts of the town can be served by gravitation. There the water is filtered a second time through artificial filters. Also it is frequently analysed chemically and bacteriologically and the analyses are published. Thus in this very essential matter of water-supply the town is quite in a favourable position.

In regard to drainage important works are in hand. The old sewers were badly built and were defective in many respects. They are now being replaced by new sewers constructed according to a general scheme based on the principle of "*tout à l'égout.*" It is questionable whether, in view of the topographical conditions, this was the best, or at least the cheapest, system; but nevertheless its full realisation will constitute a very great improvement. Most of the sewers are to be large enough for a man to enter in order to inspect them, so that a good deal of money must be spent in masonry. For some ten years the new sewers have been in course of construction. The method is certainly peculiar. The progress is very slow because the State contributes no lump sum but grants a very small annual subvention. Nor does the municipality incur any debt. There is no attempt to make a loan or to borrow money. What is done is paid for then and there and out of the annual receipts. The progress is consequently very gradual but as no debt is incurred there is something to be said in favour of such a system; it singularly simplifies the problems of local finance. Even at this slow rate all the sewers of the high or old town have now been relaid and rebuilt. Some of the main collectors are also complete but the new outfall is not yet constructed and the sewers of the lower portion of the town have still to be built. The plan is to throw the sewage into the river some miles below the town but only during the winter months when there is a large flow of water. In the summer, on the contrary, when the water runs low the sewage is turned on to fields and used for the purposes of irrigation.

Coimbra is built just in the angle made by the mountain and the plain in front of the mountain. But as the flow of water has gradually worn or carried away some of the surface soil of the mountain so has this soil been thrown up on to the plain on the sides of the river that skirts the foot of the mountain. Thus the plain is rising while the mountain is lessening. The bed of the river, charged with earth from the mountain, has risen also; and it is higher than some parts of the town. Indeed, the main sewer will have to be laid considerably below the level of the bed of the river; therefore the sewage cannot flow directly into the river. The sewer consequently must be prolonged for a considerable distance so as to reach a point where the river has fallen low enough for the main sewer to be able to empty into it by gravitation. In such circumstances it is only natural to ask whether it would not have been better to lay the main collector at a higher level and to raise by artificial means the sewage from the lower parts of the town. Also, the sewers are built so as to be able to receive 44 millimetres of rain in an hour. This is the maximum rainfall that has ever been observed. But such a rainfall is very exceptional and perhaps may not occur again for half a century or more. It seems an immense expense to build for such an unlikely contingency and that is why the mixing of rain-water with sewage is always a complication, and a costly one. Thus it is that at Coimbra several critics suggested that a separate system would have been preferable, with storm overflows going directly into the river and the raising of the sewage from the lower districts.

That the conformation of the earth is altering, and altering rapidly, can easily be seen by merely looking across the river. There will be noticed the arch of the church of the old convent of St. Claire. The earth so rose as partially to bury the church and the whole of the convent had to move and to establish itself on higher ground farther away from the river bank. It is an enormous building and yet there are now only two or three old nuns living in it. When they die the property will revert to the State. In the meanwhile the older building on the banks of the river is quite abandoned, for the earth has now reached the arch above the door of the church. This gradual disappearance of the old convent constitutes a good object-lesson in geology.

In regard to the teaching of sciences the University of Coimbra is poor but it seems to be making the best use of its restricted means. At the Faculty of Medicine there is a series of laboratories where practical work is done. Thus samples of milk are daily analysed. Wine and cheese are frequently examined, the latter being often dangerous. At the moment of my visit there were some small cheeses that had poisoned different persons and experiments were being made on animals to reproduce the symptoms and to study their cause. These cheeses, often made with goats' milk, are liable to become more or less poisonous. Close to the chemical and the bacteriological laboratories there are a physiological museum and laboratory with some of the most recent apparatus for testing muscular action, fatigue, pulsations, &c. Then there are museums of anatomy and pathological anatomy. It is simple but there are the necessary elements for practical research. The professors all express great anxiety to be well abreast of the times. Without

ostentation, recognising that poverty limits their endeavours, still they estimate that they have succeeded in securing what is essential so as to be able to give a thorough and modern scientific training.

Some visitors to Coimbra will speak at length of the antiquities of the place—the beautiful decoration of the University library and the rare old books and MSS. which it contains; the strange and quaint decorations of the great hall where the degrees are conferred will have surprised others; and some will feel inclined to lament the dilapidated condition of the fine old damask that covers the furniture of the rector's official receiving rooms. Everyone will be enthusiastic about the magnificent views of the surrounding country to be obtained from the windows, balconies, and terraces of the University buildings. Some will think how pleasant it must be to study under the shade of a palm tree, close to a camellia tree in full flower, and surrounded by many sweet-scented plants. For my part, I have endeavoured to say a few words of the Coimbra of the present and the future—the Coimbra that is trying to profit by the lessons of modern science. I know full well that the museum of ecclesiastical ornaments and relics at Coimbra possesses one of the richest collections in Europe, many of the objects dating back to the twelfth or thirteenth century. Everybody who goes to Coimbra goes to see this museum but it is not everybody who realises that Coimbra has a modern disinfecting station close to the old market; that here by the application of steam under pressure something effective is done to disinfect clothes and bedding and to prevent the spread of infectious disease. It is time that Portugal should no longer be content with its souvenirs of the past, however glorious, and I am glad to record that in this most ancient of towns something is being done to improve the present conditions and to prepare the way for a much better future.

LOCAL AND GOVERNMENT INSPECTION OF MEAT AT CHICAGO.

(FROM OUR SPECIAL SANITARY COMMISSIONER.)

FOR more than a year efforts were successfully made to keep the general public in ignorance of the denunciations of the Chicago stockyards published in these columns in January, 1905. In America itself, and especially at Chicago, the articles which appeared in THE LANCET were better appreciated. Mr. Upton Sinclair, in the now celebrated article which he contributed to *Everybody's Magazine*, says (p. 614):—

Owing to the agitation created in Chicago by the revelations of the London LANCET the City Inspection Bureau, which had been restored by Major Dunne, went to work really to enforce the law.

In THE LANCET of Dec. 23rd, 1905, we printed some figures and details concerning this newly organised service. First we gave statistics showing that at New York and at Philadelphia 14 per cent. of the total salaries paid by the municipalities of these cities went to the health department. At Chicago, with its stockyards, the proportion should be much higher but the reverse was the case. The all-important and life saving services of Chicago only received 3·1 per cent. of the salaries paid. Then we stated that as a consequence of the reorganising of the Chicago service of meat inspectors during the week ending Sept. 23rd, 1905, 173,769 pounds of meat were condemned, while during the corresponding week of the previous year only 2002 pounds had been condemned. This was no exceptional week and the statistics carried on to the month of November showed that, if the weekly average was maintained, the meat that would have to be condemned would amount to 7,141,316 pounds in a year. All this, it must be borne in mind, was for the sake of protecting not Europe and America against the output of unsound meat from Chicago but merely so as to protect the inhabitants of Chicago itself against its own stockyards.

Interested persons have sent circulars round to the press in which they say that the United States Government inspectors condemn and cause to be destroyed any carcass unfit for food; but the above figures show clearly that the work of the Government inspectors could not possibly have been efficacious. There could never have been such a discrepancy between the figures of 1904 and 1905. Mr. Upton Sinclair, after quoting and making good use of our figures, adds to them the following valuable information:—

The Federal Government employs in the packing-houses of the entire country a total of 411 inspectors; and during the year 1904 these inspectors condemned 19,097 carcasses, an average of 367 per week, or less than one per week for each inspector. During one week, as we have seen, the eight or nine new appointees of the city of Chicago condemned 496 animals, or an average of over 50 *for each inspector!* The 411 Government inspectors *passed* a total of 104,203,753 carcasses, and assuming that each inspector was on duty eight hours a day for 300 days he examined and certified to the good condition of 105 animals an hour, or nearly two a minute.

In such circumstances it is not surprising that when the authorities of the city of Chicago in the summer of 1905 began seriously to inspect the meat to be put on the local market they reported week after week that cattle which had been passed by the Government inspectors were in a diseased condition. Since the figures given above were published the Chicago Department of Health has issued an annual summary for the year 1905 and this report contains the following:—

A few weeks after the present commissioner (Dr. Charles J. Whalen) assumed charge of the department resumption of meat inspection at the Union Stockyards was ordered, and greater activity was urged in the inspection of all food-supplies in the retail markets. The force of inspectors—seven in number—was found inadequate to meet the conditions disclosed and a request for six additional inspectors was granted about the middle of October. An aggregate of upwards of 3,935,000 pounds of food "unfit for human consumption" and having a retail value of more than $337,600 was condemned by the department inspectors and destroyed under their supervision during the year. Of this amount, 3,487,000 pounds, or 85·5 per cent. of the total, was condemned and destroyed during the last five months, or subsequent to the date of the orders above referred to—August 7th. 80 per cent. of the meats was condemned on account of tuberculosis. Commenting upon this condition *American Medicine*, Dec. 23rd, says: "One stands aghast at the criminal cupidity which will induce men to attempt to sell such dangerous foods to an unsuspecting community. It is now in order to go a step farther and find out who is responsible for all this moral obliquity. It is well known that combinations of the larger meat dealers have existed in the past to the end of raising the prices of foodstuffs beyond the point to which healthy competition would reduce them. The outcry has always been in protest against increased cost of living, but here for the first time are the combinations which control the food-supply brought into a direct relation to public health. It is high time that this matter be taken out of the class of minor offences and the dealers themselves looked upon in the light of public dangers. Even in war, when all kinds of brutality are sanctioned, it is the height of dishonour—even murder—to poison the water-supply of a country. Is it any better to poison the food-supply? It is time that the public mind should develop a conscience in this direction."

In a subsequent report, dated Feb. 3rd, there occurs in regard to the above the following statement:—

The aggregate cost of this five months' work, which resulted in preventing Chicago housekeepers from wasting nearly $300,000 in the purchase of unwholesome—much of it poisonous—food, was $5000, the pay of 12 food inspectors at $83.33 per month. Of this number six were emergency inspectors, appointed in October for the remainder of the year. Since December 31st, 1905, only six food inspectors remain on duty. What 1906 has in store for the Chicago kitchen and larder in this respect will be determined by the amount of the appropriation for Health Department work.

From these quotations it will be seen that the Chicago Health Department which is on the spot, and which, being the sanitary authority for the city, ought to know, does not attach much importance to the assurances given by the stockyard firms or to the presence of inspectors representing the Federal Government.

What applies to the inhabitants of the city of Chicago applies to Great Britain. The only security possible in this country depends on the energy, ability, and the number of inspectors appointed by the British sanitary authorities to examine all the food-stuffs that come over to us from the Chicago stockyards. To rely on Government inspection in America would be a criminal folly. This the facts and figures given above clearly prove. Besides this inspection was instituted to protect Germany, Austria, France, and Denmark from trichinæ and will not prevent the presence of ptomaine poison in canned beef, or game, or poultry sent to England. The real significance of Government inspection of meat at Chicago is best shown by the experience and adventures of Dr. William K. Jacques, a physician in large practice at Chicago, who is professor of bacteriology at the Illinois State University and was bacteriologist in charge of the city inspection of meat during the years 1902–03. As he found that the packers utilised a very large quantity of condemned meat he proposed that kerosene should be injected into the carcasses. On the strength of this ingenious device he was at once accused of "insubordination" and removed from his office within a fortnight. This energetic measure was followed by the abolition of the City Bureau of Inspection which, as stated above, was only efficaciously re-established in August, 1905. The fact is, according to Mr. Upton Sinclair's

unchallenged statement, that the law regulating the inspection of meat was written by the packers themselves for the express purpose of making it impossible to prevent trade in condemned meat. By this law the Federal inspectors condemn meat but they have no legal power to destroy the meat. It is the State or municipality in which the diseased meat is found that must destroy it according to its own local regulations, and the great packing firms rightly anticipated that they would be able to influence the manner in which such local regulations were applied. How the system worked is described as follows by Dr. Jacques:—

> The condemnation of diseased meat is a State function and it is delegated to the city of Chicago in its charter. The city ordinance empowers the Commissioners of Health to perform this duty. Federal inspectors do condemn and destroy meat, but they have no legal right to do this. Their instructions as to separating and tagging of diseased meat ends with "to be disposed of according to the laws and ordinances of the State and municipality in which it is found." This throws it into the hands of the city inspectors and they are the only ones who can legally destroy it. The Federal inspectors admit this and claim that their condemnations are made under the threat of withdrawing the inspection if not allowed to do so. Foreign countries refused our meat and the packers appealed to our Government. It was finally arranged that Germany would accept American meat if our Government would guarantee its quality. To this end Federal inspection was instituted at the packing-houses. The Federal inspector comes to the packer to inspect his meat for export and at his bidding. He is under the packer's influence continually and if not satisfactory to the packer will lose his place. His instructions make it easy for him by saying that the diseased meat is "to be disposed of according to the laws and ordinances of the State and municipality in which it is found." The city inspectors are the usual grade of employees on duty during City Hall hours from 9 to 5. The civic federation employed a detective to watch three of these and found that most of their time was spent in saloons. There were only four of them at the yards. They were under a head of department at the City Hall, who got his position for strenuous activity in the last campaign. The packers' contribution made this same duty pleasant. Just to show how the packers have their hands on the situation, I have only to say that the first of this month Dr. Biehn, my successor, was withdrawn from this work and the stockyards inspection placed under "Fish" Murray, a *protégé* of the stockyards alderman, Cary. Murray was fish inspector under me and laughed at my efforts to make him do something to earn his salary. To my knowledge he never condemned a pound of fish nor did a day's work in the 14 months that I was his chief.

Such was the state of affairs prior to August 7th, 1905, and this explains why 85 per cent. of the meat condemned during last year in Chicago has been destroyed since the month of August. But such destruction is to protect the inhabitants of Chicago and not of Great Britain. As many as 150,000 animals have been killed in a single day in the stockyards. Only a small proportion of them was intended for consumption within the city of Chicago. The Federal Government does not employ enough inspectors properly to examine the rest and yet the enormous amount of meat condemned at Chicago shows how much such strict inspection is needed.

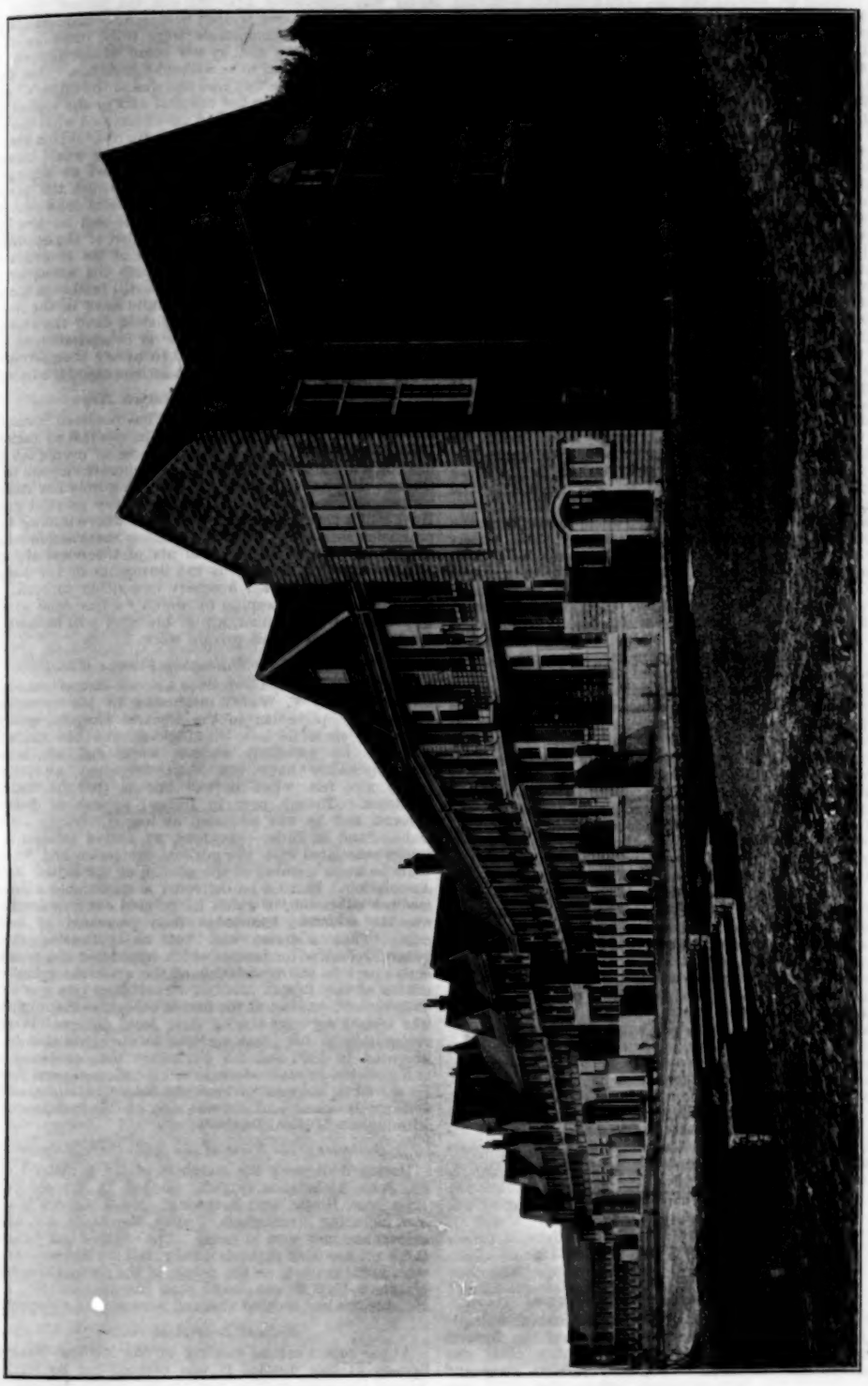
THE KING'S SANATORIUM.

THE OPENING CEREMONY.

THE King, who was accompanied by the Queen, visited the King Edward VII. Sanatorium on Wednesday last, June 13th, when His Majesty performed the opening ceremony. About 250 invitations were issued to those interested in the institution and the arrangements for the journey to and from the sanatorium were admirably carried out.

Their Majesties were received at Midhurst Station at 4 P.M. by the Lord Lieutenant of Sussex, the Duke of Norfolk, the Sheriff of the County, Mr. Philip Secretan, the Under Sheriff, Mr. Walter Bartlett, the Chairman of the West Sussex County Council, the Earl Winterton, General Lord Methuen, G.C.B., K.C.V.O., General Officer Commanding the District. On arrival at the sanatorium they were received by His Majesty's Advisory Committee—Sir William Broadbent, Bart., K.C.V.O. (chairman), Sir R. Douglas Powell, Bart., K.C.V.O., Sir Frederick Treves, Bart., G.C.V.O., Sir Francis Laking, Bart., G.C.V.O., Sir Felix Semon, K.C.V.O., Sir Hermann Weber, Dr. C. Theodore Williams, Lieutenant-Colonel Lascelles, Mr. William James, D.L., Mr. Roland Bailey, M.V.O., I.S.O., Dr. P. Horton Smith-Hartley, Dr. John F. H. Broadbent, the two last-named being the secretaries to the committee. The religious part of the ceremony having been conducted by the Bishop of Chichester (Dr. E. R. Wilberforce), Sir William Broadbent read an address which stated in brief the general objects of the institution and the design of the Advisory Committee and the architect towards carrying out their object. His Majesty replied, expressing the pleasure which it had given to him and to the Queen to be present and to open the magnificently situated building. Sir William Broadbent presented to the King the architect (Mr. H. Percy Adams, F.R.I.B.A.), the builder (Mr. Charles Langley), Miss Jekyll, who had designed the gardens, Dr. Noel D. Bardswell and Dr. G. Basil D. Adams, medical officers of the sanatorium, and Miss Blanche Trew, R.R.C., the matron. Their Majesties were then conducted round the buildings by Sir William Broadbent and Sir Frederick Treves. In the library Dr. Arthur C. Latham and Dr. F. J. Wethered, who had respectively gained the first and second prizes offered by the King for essays on the Construction of a Sanatorium, were presented to the King. Amongst those present on the occasion in addition to those mentioned above were Professor T. Clifford Allbutt, Dr. F. Bagshawe (Hastings), Dr. H. T. Bulstrode, Dr. A. Newsholme, Mr. R. Clement Lucas, Dr. Nathan Raw (Liverpool), Dr. L. A. Weatherly (Bath), and Dr. W. H. White. Dr. Nathan Raw had also the honour of being presented to the King. A brief description of the buildings, which have been fully described and discussed in the *Architectural Review*, will show that the sanatorium is admirably situated, designed, and equipped for its purposes.

The site of the King's Sanatorium is on the southern slope of Easebourne Hill, three and a half miles from Midhurst, Sussex, and seven miles from Haslemere. The building is placed at an altitude of 496 feet above the sea-level and stands in its own grounds of 150 acres of land purchased from the Earl of Egmont. In the immediate vicinity of the sanatorium are forests of pine trees. The highest point in the grounds is 630 feet above the level of the sea and the sanatorium is protected to the north and to the east by woods of fir and oak and birch. To the south-west and west the buildings lie open to the sun and air and the balconies and terraces are well arranged for the open-air treatment of the patients. Splendid views are obtained from the site and it is possible to trace the line of the South Downs as far as the Chanctonbury Ring. In the immediate neighbourhood of the sanatorium paths have been made amongst the pines and on the moorland so graded that the physicians will be able to arrange suitable exercise according to the varying needs of the patients. The sanatorium is built nearly in the centre of the site and is divided into two parts, one for administrative purposes and the other for patients. These two buildings run on parallel lines east and west and are joined together by means of a broad central corridor (see illustration). Red brick has been used for constructive purposes, relieved by white stone, and distinctive features of the buildings are the red roofs and the vivid green shutters for the windows. The edifice for the patients faces the south and south-west with a gradually curving front of nearly 700 feet in length. In the centre there are three storeys, the two wings having only two storeys. Broad balconies are continued nearly the whole length of the front of this building and the bedrooms open by means of casement doors on to these balconies. Each patient will have a part of a balcony screened off with canvas pull-down blinds. Along the ground and first floor of the patients' building are placed the bedrooms for the patients and on the top floor of the central portion there is accommodation for 22 necessitous patients. On the ground floor there are also spacious recreation rooms, writing rooms, and bath-rooms. The rooms are so arranged that each sex of either class of patients can gain access to the medical consulting rooms, recreation rooms, the dining hall, and the grounds without passing the apartments of the other sex. The bedrooms are floored with teak polished with wax and the wall-papers can be washed. The windows are of large size and can be thrown fully open. Outside the windows the shutters are so arranged that they can be closed when the windows are open, thus excluding rain and direct sunshine when required. To secure a direct draught through the bedrooms windows are placed opening on to the corridors and to guard against danger from fire every room in the building has two exits. Opposite the end of the bed in the centre of one side wall in each bedroom there is a hot-water radiator. The furniture has been manufactured by Messrs. Heal and Son and is of the plainest possible description so as to secure the utmost facility for cleanliness and the prevention of any collection of dust. Riveted joints are used in the bedsteads and rubber-shod buffers are arranged so that the bedsteads



The King's Sanatorium, Midhurst. South front from the east. From a photograph supplied to us by the *Architectural Review*.

are not pushed against the wall, these buffers being used also as handles for moving the bed. The articles of furniture stand well up from the floor and all shelves and tops of cupboards and washstands are made of glass so that they are perfectly non-absorbent.

The administrative block has a main central entrance to the north and the entrance hall is spacious and well appointed. The ground floor of this block contains waiting rooms, consulting rooms, an operating theatre, and various committee rooms, and rooms for the medical officers, together with a dispensary, library, and laboratory. There is a commodious dining hall for the patients and conveniently to this hall there are placed the kitchens, in which every arrangement is fully up to date. Accommodation is also provided in this block for the medical superintendent, the staff, and the servants. At the western end of the buildings the chapel has been built; it is a V-shaped structure, the arms of the V forming two naves, one for men and the other for women. This can be truly called an open-air chapel because the south walls of the two naves are built in open arcade work but provision is made to prevent rain or snow from drifting in. At the apex of this curious chapel there are two pulpits, one of which can be used by the preacher in wet weather when the congregation will be gathered round him sheltered, if necessary, by cloisters erected for the purpose. The chapel is heated by means of steam pipes running under the stone floor. This method of heating is a revival of the old Roman plan of warming rooms. An up-to-date laundry has been built and close to it is the engine-house with machinery for the supply of the electric light. The equipment of this portion of the institution is of a most elaborate character and care has been taken to introduce the best of modern labour-reducing machinery. The water-supply comes from a reservoir on Henley Common in North Park Copse. It is pumped to the highest part of the grounds of the institution and a reservoir has been there made capable of holding 160,000 gallons. The daily service of water will be amply met as there will generally be sufficient water to yield 60,000 gallons a day. One advantage of having a reservoir holding such a large reserve is that in case of fire there will be no lack of water. The drainage system is in connexion with that of the town of Midhurst, and although the carrying out of this drainage work presented considerable difficulty it has been found possible to complete the work in the most satisfactory manner. A word or two must be said in praise of the landscape work involved in laying out the grounds and there is no doubt that the sanatorium is rendered attractive by the fine gardens and lawns that have been placed around it. The site of the building was chosen, amongst other considerations, for the mild and equable climate of the district, largely influenced by the proximity of the sea and the shelter afforded by the pine forest. The average number of hours of sunshine for the year is 1689 and for the week 35. The average yearly rainfall is 30 inches, the number of rainy days is 157, the mean annual temperature is 48° F., the mean maximum temperature is 57·1°, and the mean minimum temperature is 41·4°.

There is accommodation provided in the King's Sanatorium for 100 patients; 14 of these will pay eight guineas a week and the remainder two guineas a week. Those who pay at the higher rate will have slightly better bedrooms and enjoy superior arrangements for feeding. The class for which the sanatorium is specially built is that just above the very poor for whom no provision in case of sickness, such as tuberculosis, exists; the institution will serve a useful purpose for such people as governesses, teachers, and badly paid members of certain professions. It is not intended that rich people should be able to send their gardeners and other servants to the sanatorium by merely paying so much a week.

BIRMINGHAM.

(FROM OUR OWN CORRESPONDENT.)

Complaints against the General Hospital.

WITHIN a short space of time two serious complaints have been made against the resident staff of the General Hospital. The first was by the father of a child who was accidentally burnt, it being asserted that great and unnecessary delay had occurred before the child was admitted, and the second was by a nurse of the Church Army who considered that she and the patient whom she accompanied had been treated with scant consideration and discourtesy. Both complaints were fully investigated by the house committee and by the board of management and both have been proved to be without foundation. The delay which occurred in the first case was due to the father's hesitation to leave his child in the hospital and in the second case it was shown that the nurse had misunderstood what the resident surgical officer had said to her. He had told her that the patient could not be admitted at once but would be taken in as soon as possible and she had waited on hoping her patient would be taken in that day, whilst the surgical officer had communicated with the medical man who sent the case telling him that he would write and let him know when the case could be received. Neither of the complaints is to be regretted, for the thoroughness of the investigations which followed and which proved both the efficiency and thoughtfulness of the staff will serve still further to increase the confidence which the general public have in the institution. Moreover, the second case should draw the attention of practitioners to the fact that it is advisable to communicate with the authorities and to assure themselves that room is available before sending a serious case for admission.

Retirement of Mr. Bennett May.

For many years Mr. Bennett May has rendered invaluable service to the Queen's Hospital and to medical education in Birmingham, but in the ordinary course of events the time has come when his term of office as honorary surgeon to the Queen's Hospital terminates and the committee has accepted his resignation of office with feelings of the greatest regret. He is still a keen and an active surgeon whose interest in his profession seems to grow with increasing years and in order to express its high appreciation of his past services the committee has recommended to the governors of the hospital that Mr. May be elected honorary consulting surgeon. His connexion with the hospital for which he has done so much will thus be maintained, whilst his time will be more free for the purposes of his private work.

Death of Sir Willoughby Francis Wade.

Many years have passed since a severe illness necessitated Sir Willoughby F. Wade's resignation of his appointment of honorary physician to the General Hospital and it is ten years since he left Birmingham, but his services to the city, his excellent medical work, and his interesting personality have not been forgotten, and sincere regret was felt when it was known that he had died in Rome. Though born in Ireland he was of Yorkshire descent, and he was educated at Rugby, Trinity College, Dublin, and in Paris. He took an active interest in all things associated with the medical profession and for many years he was a member of the council of the British Medical Association. In 1890 he delivered a memorable address on medical education, in which he pointed out how insufficient was the scientific knowledge then possessed by medical men. That address was but an indication of the general scientific tendencies which stimulated him to take an active part in the foundation of the scientific grants committee of the British Medical Association. He was a keen observer and was one of the first to recognise that diphtheria was something more than a mere local disease. It was in recognition of his great services to medicine that he was knighted in 1896 and the distinction thus conferred upon him gave the greatest pleasure to his colleagues and friends. He served on the staff of both the General Hospital and the Queen's Hospital and he was one of the founders of the Birmingham Medical Institute.

Successes of the Birmingham Ambulance Brigade.

During Whit-week the members of No. 3 district of the St. John Ambulance Brigade camped in the old park of Broughton House, near Kettering. No. 3 district is a large one, including Birmingham, Dudley, Northants, &c., and 325 officers and men were in camp. The weather was delightful, the work was done enthusiastically, and the Birmingham men were jubilant when as the result of the competition for the Markham Cup it was found that Birmingham No. 1 and No. 2 teams had secured first and second places respectively.

Medical Benevolent Society.

At the recent annual meeting of the Medical Benevolent Society of this district it was pointed out by Sir James Sawyer that 4000 medical men resided within the area of the

operations of the society—that is, within 50 miles of Birmingham—and that it would certainly be worth the while of those who were not already members to make inquiries into the objects of the society; if they did so they would in all probability become members. The funds of the society now amount to £15,940 and it grants at present 22 annuities varying in value from £18 to £36. Dr. E. Rickards is president for the ensuing year and Mr. W. F. Haslam is honorary secretary.

Opening of a New Small pox Hospital.

The permanent buildings erected at Bagnall by the North Staffordshire joint small-pox hospital board were opened in the early part of the month and there can be no doubt that Dr. G. Reid, the county medical officer, was fully justified in saying that North Staffordshire was now equipped with proper provision for dealing with small-pox. The hospital has accommodation for 39 beds, with an allowance of 2000 cubic feet per bed. It is provided with an isolation pavilion, laundry, disinfection rooms, ambulance sheds, destructor, boiler house, and stables. The cost of the permanent works and buildings was about £8000 and the hospital stands in grounds of about seven and a half acres.

The Care of Feeble-minded Children.

The Birmingham education department has sent out a circular letter to the boards of guardians in this district drawing attention to the offer of the Rev. H. N. Burden, a member of the Royal Commission on the Care and Control of the Feeble-minded, to furnish and to staff a boarding school for mentally defective children if he could feel assured that local boards of guardians and education authorities would send a certain number of cases and pay for their maintenance which would not exceed £24 per head, including cost of clothing. The letter has been considered by the boards of guardians of West Bromwich, Walsall, and Atherstone. The West Bromwich guardians make provision which they consider quite satisfactory in their own institution and cannot therefore see their way to join in the movement. The house committee of the Walsall guardians finds itself unable to recommend the guardians to give any pledge but it is prepared to give full consideration to the matter if the scheme is carried out. The feeling at Atherstone was more favourable, for the clerk pointed out that they had experienced considerable difficulty in finding suitable institutions for the feeble-minded who had become chargeable to the union and he thought that the scheme would supply a much felt want. Eventually the subject was referred to the committee for further consideration.

June 12th.

LIVERPOOL.

(FROM OUR OWN CORRESPONDENT.)

Tinned Meat: Condition of the Liverpool Supplies.

Dr. E. W. Hope, the medical officer of health, made an important statement to the health committee on June 7th in reference to the tinned-food scare. He said that the great bulk of the tinned meat which came into Liverpool arrived in a very excellent condition. It was not all for consumption in Liverpool but great quantities of it passed through the port. The trade was a very large one and perhaps thousands of tons were consumed annually in this country and no single instance of any harm arising had so far been brought to light. On the other hand, they knew that in a trade so extensive there occurred what were known as "blown" tins, owing, perhaps, to defective fastening or other causes. The contents then decomposed. That happened in relatively a small percentage of cases and appeared much the same as resulted from the defective corking of wine. Those tins were carefully taken out by the importers and sent to the corporation depôts and were there punctured and put into the destructors. 300 or 400 tons every year were dealt with in this way but the great bulk of the stuff was in first-class condition. They had to set against these facts—facts known to them—statements coming from an exceedingly high authority—no less a personage than the President of the United States, who says that the conditions in Chicago are so revolting that the reports are unfit for publication. They must balance in the scale these two things, one, the report made by an authority of indisputable integrity and exactness, and the other, what they had themselves experienced. Possibly the explanation was that the very bad material had been kept for home consumption in America but as a sanitary authority they could only judge by what they had read in the newspapers. Whilst the President gave his immense weight of authority to the abominable conditions existing in Chicago he (Dr. Hope) should advise people to refrain from taking anything that came from Chicago so long as these conditions existed, but he was sure that the public were not so unwise as to discard altogether that very excellent form of food which was contained in tins preserved in varied ways and which formed an important part of the food of this country.

Hospital Saturday Fund.—Gift to the Royal Southern Hospital.

The honorary treasurer of the Hospital Saturday Fund has acknowledged in his first list the receipt of contributions from the employees of various workshops amounting to £6034. The second list will be published on July 3rd.—The Royal Southern Hospital has received a handsome gift in the shape of stained-glass windows for the chapel of the hospital. Situated as the chapel is, on the first landing, this addition can be seen by all visitors and also by convalescent patients. The gift is from Mr. William Moss and his sisters in memory of their mother who for a long period took a deep interest in the work of the hospital. The three windows, which face the west, represent the central three-light window, "Faith, Hope, and Charity"; the two-light window to the north, "Christ blessing little children"; and the two-light window to the south, "The Nativity of Our Lord." The whole gives a beautiful glow of colour to the little chapel. A suitable inscription is recorded at the foot of the central window.

June 12th.

SCOTLAND.

(FROM OUR OWN CORRESPONDENTS.)

Consumption and the Edinburgh City Hospital.

SOME weeks ago it was stated that wards had been allocated at the Edinburgh City Hospital for the reception of advanced cases of pulmonary tuberculosis. The public health committee of the town council, it seems, is disappointed that so far the accommodation provided has not been taken advantage of to a greater extent than it has been. Since the opening of the wards in April last 21 patients have been admitted, nine of whom were males and 12 females. Eight deaths have occurred. One patient died after four and a half weeks' residence, four after three weeks, one after one week, and two after part of a week. In the beginning of this week there were five males and eight females remaining in the wards. Since May 25th only one application for admission had been made, although the deaths from pulmonary tuberculosis as reported averaged 13 or 14 a week. It was also stated that the opportunities for voluntary disinfection had not been taken advantage of as they might by the medical profession. The committee recommended its medical officer to bring the advantages of the hospital under the notice of the medical secretaries of the public dispensaries.

Legal Decision regarding Cascara Sagrada.

The Leith public health authorities some time ago raised an action against a highly reputable firm of druggists charging them under the Sale of Food and Drugs Act with selling to a sanitary inspector ten ounces of a liquid extract of cascara sagrada which was destitute of alcohol, whereby they were liable to a fine of £20. Without going minutely into the case it may be indicated that the contention was that the liquid extract of cascara ought to have the composition given in the Pharmacopœia and be compounded according to the formula given there. It was argued by the defence that the article supplied was of the nature, substance, and quality of the article demanded, and that instead of using alcohol as the preservative glycerine was used, because for this drug it was a much better preservative than alcohol. The sheriff in giving judgment in favour of the druggists laid stress upon the preservative element in pharmaceutical preparations and also upon the position of the British Pharmacopœia. If the Pharmacopœia formula had to be followed—if alcohol were used to a less extent than 17 per cent.—then the purchaser could repudiate and claim damages. He thought that might be the position occupied by the formulæ of the British Pharmacopœia as regarded the preservatives of drugs, but if so that position did not seem to have been conceded to it hitherto. So far as the proceedings in this case had gone it would appear that this was

the first case in which the prosecution had been raised to enforce the use of a special preservative contained in a British Pharmacopœia formula. The sheriff thought that such a position would discourage the progress of pharmaceutical chemistry in improving the preservatives in drugs. When the Sale of Food and Drugs Act was passing through Parliament that the action of the druggists would have been made an offence punishable by a fine of £20 was to his mind inconceivable.

Verminous Children in Schools.

Since the passing of the Corporation Police Order of two years ago a large amount of work has fallen upon the sanitary inspector's staff by the clause dealing with dirty and verminous children attending the schools under the Glasgow School Board. On nearly 2000 occasions last year the female inspectors paid visits to the schools in quest of offenders and it does not point to a satisfactory state of the children when over 4000 of them were found in such condition as to require to be dealt with. The homes of these children were visited and where found necessary the bedding was destroyed and the houses were cleansed. Fortunately, there were only a few cases where it was found necessary to put the full powers of the Order into operation and to take the children from the parents so as to have them cleansed by the officials of the corporation. There can be no doubt that the putting into execution of this Order has done much for the welfare of those children for whom it was primarily intended. By such systematic inspections not only are the cleanliness and general well-being of the children likely to be increased but also it is possible that we may see some diminution in the number of cases of skin affections, glandular abscess, &c., which have to be treated as sequelæ of this condition in the out-patient departments of our large hospitals. It is a point of some significance that in most of the cases which had to be dealt with the parents were aliens.

Glasgow Ear, Nose, and Throat Hospital.

At the annual meeting last week of the subscribers to this hospital Dr. Thomas Barr read the medical report, in which it was shown that 2811 patients presented themselves for treatment, being an increase of 268 over the previous year. The dispensary department had an average daily attendance of 50 patients, representing 3017 cases of disease of the ear and 1381 of the nose and throat. To the indoor department 132 patients were admitted, showing an increase of 22 over the previous year. In connexion with Dr. Barr's summer and winter University courses 47 students received practical instruction. In conclusion, Dr. Barr appealed to the subscribers for a complete set of electrical apparatus for the examination and treatment of patients and for a new operating theatre for the institution.

Dramatic Societies and Charitable Institutions.

The Glasgow Orpheus Club has handed over a sum of £220 for the benefit of Belliefield Sanatorium, Lanarkshire, this being the sum made by the club in a series of performances during last winter. The St. Andrew's Ambulance Association has benefited to the extent of £100 by a similar contribution from "The Players" Dramatic Society.

The Health of Jute Workers.

In connexion with the proposed new regulations by the Home Office affecting ventilation and temperature of mills, the removal of dust likely to cause injury to the health of the workers, and precautions against the inhaling of dust, a conference took place at Dundee last week between His Majesty's Inspectors of Factories and representatives of the Dundee Jute Spinners' Association.

June 9th.

IRELAND.

(FROM OUR OWN CORRESPONDENTS.)

Royal College of Surgeons in Ireland.

AT a meeting of the Fellows held on June 11th Mr. Henry R. Swanzy was elected President and Mr. John Lentaigne Vice-President for the ensuing year. The only change in the *personnel* of the council was caused by the fact that Sir William Thomson did not present himself for re-election. The vacancy was filled by the appointment of Mr. William Ireland de Courcey Wheeler. The *personnel* of the council now is: Mr. Edward Hallaran Bennett, Mr. William Stoker, Sir Charles Alexander Cameron, C.B. (honorary secretary of the College), Mr. John B. Story, Sir Charles B. Ball, Sir Thomas Myles, Sir Arthur G. Chance, Mr. Richard D. Purefoy, Sir Lambert H. Ormsby, Mr. Henry G. Sherlock, Mr. R. Bolton McCausland, Mr. John S. McArdle, Mr. Robert H. Woods, Mr. Thomas Donnelly, Mr. William Taylor, Mr. Edward H. Taylor, Mr. G. Jameson Johnston, Mr. R. Charles B. Maunsell, and Mr. Wheeler.

Irish Medical Association.

The annual meeting of the members of the Irish Medical Association was held at the Royal College of Surgeons in Ireland on June 5th, Dr. L. Kidd being in the chair. The sixty-seventh annual report of the council was read and stated that 34 members were elected during the past year. Seven members had died, 24 had resigned, and 26 defaulters who owed more than two years' subscription had been removed from the list of members. The agitation in favour of increased remuneration for the Poor-law medical officers had not proved effective, although there had recently been evidence at Tullamore and elsewhere of a favourable change in the feelings of the guardians. A long discussion took place as to the financial condition of the association and Mr. W. Joseph Shee, J.P., of Duncannon, who formerly acted as secretary to a local branch, described the state of affairs as "parlous." He stated that their income amounted to £1000 a year, almost the whole of which went to officials, and he proposed that a committee should be appointed to inquire into, and to report on, the financial condition of the association. The motion was seconded by Dr. W. J. Maguire and carried. At the subsequent election of officers Mr. John S. McArdle (Dublin) was elected president for the ensuing year, after which he took the chair and delivered an address in which he insisted that union must exist among the members and that nothing could be worse than acrimonious discussion of trivial points. Although the association had accomplished much useful work for the Poor-law medical officers many of them seemed ungrateful and were not even members of the association. He added that the Poor-law medical officer who was not a member of the association deserved to be left where the association found him—"a wretched derelict on the sands of time."

The Belfast City Corporation and the Salary of the New Medical Officer of Health.

Two hours were occupied at the meeting of the Belfast city council in committee on June 11th, in discussing the salary to be paid to the new medical superintendent officer of health when appointed. It appears that after the interchange of lively personalities between certain members a resolution was passed by a majority of one, which left the situation exactly as it was before the meeting. A motion, I understand, was brought forward that the salary should be £800 per annum, to which an amendment was moved making it necessary for the person appointed to the post to have had five years' previous experience as a medical officer of health in Ireland or as a medical officer of health in Great Britain. This and another amendment fixing the salary at £600 were defeated. Then a third amendment making the salary £500 was moved, with the result that 16 voted for it and 15 against. A poll was challenged when this amendment was put as a substantive motion. Then a member coming in late voted against the motion which made the numbers equal. The Lord Mayor gave his casting vote against the motion, which was thus defeated by 17 to 16. The state of affairs being now the same as at the commencement the whole question was adjourned for another week. Out of 60 members of council there were never more than 40 present in the council chamber, which in the circumstances shows want of public spirit, while to suggest £500 as an adequate salary for the appointment of medical officer of health of a city of 350,000 inhabitants seems to imply that some members of the corporation do not want a first-class man. It is now publicly suggested that the citizens should ask for the appointment of a commission to inquire into the facts as regards the health of Belfast.

June 12th.

VACCINATION EXPENDITURE.—In the Bristol union the cost of vaccination during 1904 was £1680, as compared with £322 in 1899; in Gloucestershire it was £4497, as compared with £1051 in 1899; and in Somersetshire it was £3564, as compared with £1046 in 1899.

PARIS.

(FROM OUR OWN CORRESPONDENT.)

An Election to the Academy of Medicine.

M. Kaufmann has been elected a member of the Academy of Medicine in the section of veterinary medicine. He received 52 votes out of a total of 73 which were given.

The Transmission of Rabies by Scratches.

At a meeting of the Biological Society held in May M. Remlinger, director of the Imperial Bacteriological Institute at Constantinople, described three cases which showed that rabies might occur not only as the result of bites or the licking of superficial wounds but also as the result of scratches inflicted by the animal. Some animals were in the habit of licking their paws and the investigations of Roux and Nocard have shown that the saliva possessed virulent properties several days before the appearance of the first symptoms of rabies. When the disease had declared itself a new factor was introduced. Froth fell from the mouth of the animal and lodged on its feet and claws, especially when it was either confined in a small place or tied up. In the scratches made by a dog or cat numerous nerve filaments w re laid bare and the virus in this way had access to them. Persons scratched by an animal either known or suspected to be rabid ought therefore to be advised to undergo treatment by Pasteur's method with the least possible loss of time.

The Non-recognition of Foreign Diplomas in France.

It has recently been decided by a law court at Valenciennes that a foreign medical practitioner not possessed of a diploma obtained in France is not entitled to bring an action for the recovery of fees. As this decision is of exceptional interest, the principal points of the case may be summarised as follows. A medical man practising in Brussels attended an adult male patient residing in France. On the death of the patient his general legatee received from the medical man an account for 2500 francs for professional attendance. The legatee considered the amount excessive but offered to pay 1000 francs in full discharge of all claims. The court regarded the sum of 1000 francs as sufficient and would have sanctioned the payment, but on the other hand the medical man had no French diploma and the law directs that no one may practise medicine in France unless possessed of a diploma of Doctor of Medicine delivered by the French Government. One of the sections of this statute declares that any person habitually treating disease without having such a diploma contravenes the law. As regards the question of "habitual" treatment, although this Belgian practitioner attended only one patient in France, yet in the eye of the law his repeated visits (*la réiteration du fait*), which he relied on in support of his claim, constituted habitual treatment. In deciding the question of habitual treatment it was necessary to consider the visits (*faits*) with reference to the person making them and not with reference to the person or persons visited, and the repetition of the visits counted for more than the fact that there was only one patient (*la non-pluralité des sujets*). The medical attendance for which the practitioner claimed remuneration was, in the circumstances, illegal; the court therefore disallowed his claim and adjudged him to pay the costs.

Opium Smoking.

In a previous letter[1] I spoke of the ravages which the use of opium causes in French naval ports owing to the opium-smoking dens which have been established, more especially at Toulon. During the month of May the Naval Minister, who has been much exercised with the increase in the use of opium, asked the Prefect of the Department of War to think out some measures which might be useful in the fight against this pernicious custom. A conference was therefore held between the Prefect of War, the Procurator of the Republic, and the Commissaire Central and it was decided that domiciliary visits should be paid to the opium-smoking dens. Visits were accordingly made to these places and to the houses of those who sold opium. Large quantities of the drug were seized and the holders thereof will be prosecuted before the Correctional Tribunal.

The Fight against Absinthe.

The Hospitals Medical Society has unanimously agreed to a motion put forward by M. Jacquet affirming that the use of absinthe is one of the gravest causes in the degeneration and mortality of the race and the public authorities are thereby invited to interdict both its manufacture and its sale.

June 12th.

[1] THE LANCET, April 14th, p. 1062.

NEW YORK.

(FROM OUR OWN CORRESPONDENT.)

Heteroplastic Ovarian Grafting followed by Pregnancy and the Delivery of a Living Child.

A REMARKABLE case of successful ovarian grafting was reported to a recent meeting of the Surgical Section of the Academy of Medicine. The operation was performed at the Post-Graduate Hospital of this city by Dr. Robert T. Morris, assisted by several gynæcologists. The patient was 21 years of age, was married at the age of 18, became pregnant and miscarried at three months, and ceased menstruating at 19, the cause being cirrhotic ovaritis. The ovaries were removed with Tuffier's angiotribe, this instrument being selected because it avoids the possibility of leaving ovarian tissue behind. The grafts were taken from another patient who was the mother of three children and was suffering from prolapse. The grafts were inserted in slits made through the peritoneum of the broad ligament of either side, parallel with the oviduct, and dorsal from the original seat of the ovary. The grafts were about half an inch long and one-fourth of an inch wide and were held in place by a single catgut suture. The grafts were so placed that the cut surface of the ovary lay in contact with the cut surface of the broad ligament in order that the nutrition of the graft might be maintained through the lymph circulation pending the formation of new capillaries; the uncut surface of the ovary was allowed to project into the free peritoneal cavity to facilitate the free escape of the ova. The patient made a good recovery. Four months after the grafting she menstruated, menstruated again nearly six months later, and from that time regularly. The operation was performed on Feb. 11th, 1902, and on March 15th, 1906, she was delivered of a child weighing seven and a half pounds. Dr. Morris states that he has performed homoplastic and heteroplastic ovarian grafting in 14 cases with but one case of conception. He remarks: "The present case of heteroplastic grafting renews our hope that we may make fertile some women who have reached the menopause through disease or possibly after the normal menopause."

The American Medical Association.

The fifty-seventh annual session of the American Medical Association was opened on June 5th at Boston and was well attended. The address in Medicine was delivered by Dr. Frederick C. Shattuck of Boston, whose oration took the form of a rapid *résumé* of the progress of medical science since, with the discovery of the circulation of the blood, that progress became scientific. The address in Surgery was delivered by Dr. Joseph D. Bryant of New York, who reviewed our present-day knowledge of malignant disease—"the surgical topic," as he rightly said, "which to-day is engrossing more of the time and energy of scientific medical endeavour than is any other subject in the entire range of surgery." An interesting address on medical ethics was delivered by Dr. William J. Mayo, F.R.C.S. Edin., of Rochester, Minnesota, under the title "The Medical Profession and the Issues which Confront it." The work in the sections promises to be interesting. The session will close on June 8th.

June 6th.

Obituary.

SIR WILLOUGHBY FRANCIS WADE, M.D. DUB., F.R.C.P. LOND.,

LATE PRESIDENT OF THE BRITISH MEDICAL ASSOCIATION; CONSULTING PHYSICIAN TO THE BIRMINGHAM GENERAL HOSPITAL; PROFESSOR OF PRACTICE OF PHYSIC AND CLINICAL MEDICINE, QUEEN'S COLLEGE, ETC.

FEW of the profession whom business or pleasure took to Tuscany within the last decade can have failed to meet Sir Willoughby F. Wade either in the *salons* frequented by the literary, scientific, or artistic society in which Florence is traditionally rich, or at his own villa on the

Fiesolan Slope where he spent the evening of his days in the medical studies from which the open-air delights of an Italian *villeggiatura* could not wholly wean him. Given to hospitality, in which he had a congenial helpmate in his accomplished wife, aided from time to time by the musical gifts and artistic training of his brother-in-law, who was also his cousin, Sir George Power, he made the reunions at the Villa Monforte particularly attractive to those of his compatriots whose professional interests did not exclude a taste for fine art and for well-inspired discussion of the topics—political, social, and other—of the passing day. Not a few of his guests owe to these pleasant symposia a more intelligent appreciation of the Italian problem than they could have gathered from ordinary sources and in one out of the many fields which Italy offers to the interested publicist—a field in which she can claim "a sinister priority," the romance of crime—he had made special studies which constituted him an authority among Italians themselves. The papers which he contributed to one of the leading reviews, the *Rassegna Nazionale*, on the lethal use of the knife and the appalling prevalence of assassination in which it culminates, are replete with accurate research and shrewd suggestion and have, as already indicated in these columns,[1] been welcomed in Italy as of real value to the criminal anthropologist and the legislative reformer.

Born in Bray, county Wicklow, 77 years ago, of a family distinguished on both sides in the military, the clerical, and the legal professions, Willoughby Wade was educated first at Brighton and Rugby, then at Trinity College, Dublin, for the medical calling, graduating in Arts and finally taking his M.B. degree, gaining distinction in either school. He had already, according to the good old custom of those days, been apprenticed to Mr. Douglas Fox, a general practitioner of great popularity in Derby, and after graduation he soon found a congenial post as house physician to the General Hospital at Birmingham, in succession to Dr. Heslop, a friend and fellow student of his own. From the General Hospital he passed on to the Dispensary as physician and then in 1860 to the Queen's Hospital in the same capacity. In quick succession he was appointed senior physician to the Queen's Hospital and professor of medicine at Queen's College, till in 1865 the post of physician to the General Hospital fell to him. Here he remained on the staff until the April of 1892, being senior physician for the last seven years, and on retiring from the post was appointed consulting physician. Actively engaged in consultant practice, he came in frequent contact with the leaders of the profession in the metropolis and in the Midlands, always leaving a favourable impression of his clinical accomplishments, his fertility of resource, and the kindly suavity of his address. Knighted in 1896 for professional skill and for the impetus which he gave to the best interests of medicine as president of local societies and in connexion with the British Medical Association, he bethought him, on reaching his seventy-first year, of retiring from active work. The health of Lady Wade, too, required additional attention, so he left Birmingham for Italy, purchasing the Villa Monforte at Maiano, near Florence, and devoting himself, as already indicated, to the pursuits which kept his mental energies well employed and enriched his experience with impressions of which his numerous guests, professional and other, reaped the benefit. The keen, not to say inclement, air of the neighbouring Apennines proving rather trying to Lady Wade, he decided on disposing of his villa and removing to Rome where he took an apartment in the Via Torino. But he was not destined to enjoy the change to the Eternal City. He had barely settled in it when his health rather suddenly gave way and after lingering a few months under treatment he gradually succumbed on May 28th.

Sir Willoughby Wade will long be remembered for his active intervention in the working of the British Medical Association, of which he was treasurer from 1882 to 1885, after which he became one of its vice-presidents. Secretary of the medical section at the meeting held in 1871 at Plymouth, he became vice-president of the same section next year. At the Birmingham meeting, as President, he delivered a memorable address in 1890—an address which dealt with abuses in the preliminary training of the medical student, particularly in the ineffective teaching of Latin, a language which he knew too well to despise for its own sake. Considerable controversy was evoked by the address and Professor Huxley supported Sir Willoughby Wade in a characteristic letter to the *Times*. To the last his thoughts were with the profession, its education, its social interests, and its scientific progress, and the present writer can recall a singularly interesting discussion in Florence on the recent lectures of Mr. H. T. Butlin on cancer in which Sir Willoughby Wade took the leading part. His reminiscences of old Birmingham days and the men of light and leading, professional and other, in the great metropolis of the Midlands were always kindly, often humorous, and not seldom of historical value, deriving not a little of their charm from the scene in which they were poured forth—a lovely Italian villa, with all the floral surroundings, and the landscape, exhilarating and pathetic by turns, in which it lay. The younger physicians and surgeons from the British Isles who assisted at these symposia will not fail to keep them in remembrance or to recall the kindly and accomplished host who made their Italian holiday an even greater pleasure than they had expected to enjoy.

[1] THE LANCET, June 24th, 1905, p. 1734.

MICHAEL McWILLIAMS BRADLEY, M.D., C.M. GLASG., L.R.C.P. EDIN., J.P.

BY the death of Dr. Bradley Jarrow has lost one of its oldest practitioners as well as one of its best-known citizens. He had been in ill health for several months but was able to attend to his practice till quite recently when he was compelled to seek rest and change at his country seat, Tamnagharrie Park, Warrenpoint, County Down, and it was there that he died on May 25th. Dr. Bradley went to Jarrow in 1872 as assistant to Dr. Kelly whom he succeeded and by his extraordinary energy and remarkable capacity for work he built up one of the largest practices in the town. At one time he held the post of medical officer of health of Jarrow and he was at the time of his death parish surgeon and surgeon to the police. In public affairs he took a lively interest and for a number of years was a member of the town council, while for 20 years he served on the commission of the peace. Politically he was a Nationalist and was honorary president of the Wolfe Tone branch of the United Irish League and a little while ago his name was before more than one North of Ireland constituency for selection as a Parliamentary candidate. He was a strong advocate for temperance principles and did much to further the movement in the north. In religion he was a Roman Catholic. As a personality no one was better known and respected and no one was better loved for genuine kindliness. He was about 64 years of age and leaves a widow but no family.

EDWARD LONG JACOB, M.R.C.S. ENG., L.S.A. LOND.

Edward Long Jacob, who died suddenly at his residence, Croydon-road, Reigate, on May 25th, had been for many years a medical officer of health of a large portion of the county of Surrey. He was born in 1834 and was educated at Sheffield and at Queen's College, Birmingham. At the latter institution he began the study of medicine which he afterwards continued at St. Bartholomew's Hospital and at the Rotunda Hospital, Dublin. He obtained the diplomas of M.R.C.S. Eng. and L.S.A. Lond. in 1855 and held the appointment of house surgeon to the Royal Hants County Hospital. Thence he went to Birkenhead and was elected surgeon to the Birkenhead Hospital.

In 1873 he was appointed medical officer of health of a large district in Surrey stretching from Chertsey to Reigate, but in 1900, finding that the work was too much for him, he resigned the charge of the Epsom and Dorking urban and rural districts, retaining only the Reigate urban and rural districts. These two last posts he resigned in March of the current year but as the authorities had some difficulty in obtaining a successor he consented to continue in office until midsummer. He did admirable work as a health officer and the Reigate town council, the Reigate rural district council, as well as the Dorking urban council, have all recorded their regret for his death. His funeral took place at Wandsworth Cemetery on May 30th, being attended by many of the local officials with whom he had worked, by Dr. L. W. Darra Mair on behalf of the Local Government Board, and by Dr. E. C. Seaton, medical officer of health of the county of Surrey.

DEATHS OF EMINENT FOREIGN MEDICAL MEN.—The deaths of the following eminent foreign medical men are

announced:—Dr. Guerassimovich, director of the medical department of the Servian Army.—Dr. Mackall, emeritus professor of physiology in Washington.—Dr. Ferreira dos Santos, professor of medicine in Bahia.—Dr. Tarnovski, professor of dermatology in the St. Petersburg Military Medical Academy.

Medical News.

UNIVERSITY OF CAMBRIDGE.—Dr. Nuttall, F.R.S., has been appointed Reader in Hygiene and Dr. L. Humphry University Lecturer in Medicine.—A Gordon-Wigan prize of £50 will be awarded in the Easter term, 1907, for a research in chemistry carried out in Cambridge by a member of the University under the standing of M.A.—The degree of LL.D. *honoris causâ* will be conferred on His Excellency M. Paul Cambon, French Ambassador, on June 16th.—Professor G. Sims Woodhead has been delegated to represent the University at the dedication of the new buildings of the Harvard Medical School on Sept. 25th and 28th.—At the congregation on June 7th the following degrees were conferred:—

M.D.—G. O. Lambert, St. John's; J. L. Timmins, Emmanuel.
M.C.—W. M. Mollison, King's.
M.B.—G. H. U. Corbett, King's; J. R. Draper, St. John's; A. B. Howitt, Clare; J. C. L. Roberts, Clare; F. J. Thornton, Caius; C. J. Wilson, Christ's; and W. H. Robinson, Downing.
B.C.—G. H. U. Corbett, King's; A. B. Howitt, Clare; E. C. Hughes, Clare; F. J. Thornton, Caius; C. J. Wilson, Christ's; C. F. Fothergill, Emmanuel; and W. H. Robinson, Downing.

THERE will be a distribution of prizes at the School of Pharmacy of the Pharmaceutical Society of Great Britain, 17, Bloomsbury-square, London, W.C., on Wednesday afternoon, June 27th.

DEATH OF A CENTENARIAN.—The *Times* of June 9th states that Madame Dupuis, Belgian's oldest inhabitant, died on June 8th in the village of Chapelle, near Brussels, aged 105 years. Madame Dupuis, who lived in the same farmhouse for 92 years, was said to be the only living witness of Napoleon's flight on June 18th, 1815, when as a girl of 14 years she followed the sound of the cannon to the field of Waterloo. Her two surviving sons are both octogenarians. It may be remembered that in THE LANCET of July 8th, 1905, p. 126, a Madame Rolland of Seneffe in Belgium is referred to as having then just completed her 104th year and as having been a witness of Napoleon's flight.

MEDICAL MAGISTRATES.—The name of Stanley B. Atkinson, M.A., M.B., of the Inner Temple, barrister-at-law and an honorary secretary of the Medico-Legal Society, has been placed on the commission of the peace for the County of London.—Lieutenant-Colonel F. G. Adye-Curran, A.M.S. (retired), the representative of the Apothecaries' Hall of Ireland on the General Medical Council, has been appointed a justice of the peace for the county of Dublin.—Dr. F. H. Worswick has been placed on the commission of the peace for Manchester.—Dr. Percy Austin Roden, honorary physician to the Brine Baths Hospital, has been made a justice of the peace for the borough of Droitwich.

THE AMERICAN ROENTGEN RAY SOCIETY.—The annual meeting of this society will be held at Niagara Falls, New York, U.S.A., on August 29th, 30th, and 31st—a few days after the close of the annual meeting of the British Medical Association in Toronto, from which place Niagara Falls is easily reached. The executive committee of the American Roentgen Ray Society hopes that all medical men from this country, especially those interested in any branch of x ray work, who propose to go to Toronto will so arrange their visit to Niagara Falls as to enable them to be present at the whole or part of the proceedings. Those doing so will be accorded all the privileges of temporary membership for the meeting, permitting them to participate in the debates and social functions, even though they may not be willing to prepare papers and to read them. It will greatly facilitate the work of the organising committee if those who are likely to be present will as soon as possible communicate with Dr. E. R. Morton, 22, Queen Anne-street, Cavendish-square, London, W., who will forward their names to the proper quarter, from which official invitations will be issued.

FREEMASONRY.—The Rahere Chapter, in connexion with the Rahere Lodge, was formally inaugurated in the Great Hall of St. Bartholomew's Hospital on June 12th in the presence of a large and distinguished gathering of medical and other Freemasons. The founders entertained their guests afterwards at a banquet at the Imperial Restaurant.

THE EARTHQUAKE AT SAN FRANCISCO.—At a meeting of the Lostwithiel (Cornwall) town council held on June 5th it was stated that Dr. Coulson of San Francisco (who had recently given a sum of money for the purchase of a recreation ground for the town, as has been already mentioned in THE LANCET) had lost all his possessions through the recent earthquake and fire at San Francisco. The members of the council decided to send a letter of sympathy to Dr. Coulson, and the opinion being expressed that it would be a graceful act in the circumstances to refund the money to him it was left to a committee to consider the question and to deal with the matter.

UNIVERSITY COLLEGE, LONDON (UNIVERSITY OF LONDON).—The following scholarships and exhibitions are offered for competition in September, 1906, in the Faculty of Medicine. A. The Bucknill Scholarship of the value of 135 guineas, entitling the holder to the Intermediate Medical Course (including Part II. of the Preliminary Scientific) at University College and the Final M.B., B.S. Course at the University College Hospital Medical School. B. Two Exhibitions of the value of 55 guineas each, entitling the holders to the Intermediate Medical Course (including Part II. of the Preliminary Scientific) at University College. Two Exhibitions of 80 guineas each, entitling the holders to the Final M.B., B.S. Course, are offered for competition in September, 1906, tenable at University College Hospital Medical School. Further particulars may be obtained from the Secretary of University College, London.

ROYAL SANITARY INSTITUTE.—A sessional meeting of this institute will be held on June 29th, at 7.30 P.M., in the Council Chamber of the county offices, St. Mary's Gate, Derby, when Dr. S. Barwise, the medical officer of health of Derbyshire, and Mr. John White, public analyst for the county borough of Derby, will discuss the Provision of a Pure Milk-supply. The chair will be taken by Colonel J. Lane Notter, R.A.M.C., and a general discussion is invited. In connexion with this meeting arrangements have been made to visit Messrs. Nestlé's works at Tutbury and also the Derby sewage works. Tickets for admission and further particulars can be obtained from Dr. S. Barwise, County Offices, Derby, and from Dr. W. J. Howarth, Public Health Department, Ford-street, Derby, who are acting as local honorary secretaries. The subject of a pure milk-supply is an important one and the meeting should attract visitors from all parts of the country. For many people an additional attraction may be the fact that the Royal Agricultural Society will hold its show at Derby during the same week.

UNIVERSITY COLLEGE HOSPITAL.—Sir Donald Currie, G.C.M.G., laid the foundation-stone of the School of Advanced Medical Studies, the Nurses' Home, and the Maternity Students' House in connexion with University College Hospital, Gower-street, London, W.C., on June 11th. The cost of the buildings, as is well known, is being defrayed by Sir Donald Currie and his friends, thus affording a remarkable example of open-handed philanthropy. Among those on the platform were Sir Donald and Lady Currie, the Duke and Duchess of Bedford, Lord Fitzmaurice, Sir Edward Busk, Vice-Chancellor of the University of London; Sir Thomas Barlow, senior physician to the hospital; Mr. Arthur E. Barker, senior surgeon to the hospital; Sir Arthur Rücker, Principal of the University of London; Dr. J. Kingston Fowler, dean of the Faculty of Medicine of the University of London; Dr. T. Gregory Foster, Ph.D., Principal of the College; and Dr. J. S. Risien Russell, dean of the Faculty of Medicine of the College. The inscription on the stone read as follows: "This stone was laid by Sir Donald Currie, G.C.M.G., through whose munificence the School of Advanced Medical Studies, Nurses' Home, and the Maternity Students' House was erected in connexion with University College Hospital, Monday, 11th June, 1906." Both before and after the ceremony a selection of music was performed by the band of the Scots Guards and refreshments were served in the College grounds at the close of the proceedings.

BRITISH ELECTRO-THERAPEUTIC SOCIETY.—The next meeting of this society will be held on June 22nd, at the Criterion Restaurant, London, W., under the presidency of Mr. J. Hall-Edwards, at 7 P.M. The annual dinner will be held at 7.30 P.M., or just after the close of the meeting. Members desirous of reading papers or exhibiting apparatus should communicate with one of the honorary secretaries, Dr. W. Kenneth Wills, 19, Whiteladies-road, Clifton, Bristol, or Dr. E. R. Morton, 22, Queen Anne-street, London, W.

THE LATE DR. JOHN HENRY BRYANT.—The funeral of the late Dr. John Henry Bryant of Mansfield-street, Cavendish-square, London, took place on May 26th, at his native town of Ilminster, Somerset, in the presence of a large gathering of friends and townspeople. The deceased, who was born in 1867, was educated at Ilminster Grammar School and Sherborne School. He was very popular in Ilminster, where his father, the late Mr. W. H. Bryant, resided for many years. Much sorrow is felt there at his early death and great sympathy is expressed for his widow and three children.

DEVON AND EXETER DENTAL HOSPITAL.—The annual meeting of the subscribers to this institution was held on June 8th under the presidency of the Rev. Prebendary J. G. Dangar, D.D. The medical report stated that during 1905 the patients numbered 4344. The financial statement was satisfactory and showed a favourable balance of £7. The committee alluded to the munificent gift of Mrs. Nosworthy, who had recently given new premises for the hospital at Southernhay West, and added that the building would be finished and furnished by September next. Prebendary Dangar, who was re-elected President, stated that although the hospital had been in existence about 25 years the committee had never been one penny in debt.

SALICYLIC ACID IN CIDER.—The managing committee of the National Fruit and Cider Institute at Long Ashton, near Bristol, in July, 1905, communicated with the Board of Agriculture in reference to the analysis of cider, and asked whether the institute could assist in the analysing of samples and in endeavouring to encourage the sale of pure cider and perry. The Board replied that very little information was available concerning the adulteration of cider and suggested that the institute should ascertain the extent to which adulteration takes place and the best means of detection. A copy of this letter was sent by the committee to each of the county council authorities announcing that the National Fruit and Cider Institute would, without any fee, analyse samples of cider and perry, and suggesting that special attention should be given to those imported from abroad. This resulted in 66 samples being sent from various corporations and county councils, including those of Glasgow, Surrey, London, Monmouth, and Cornwall. Mr. F. J. Lloyd in his report upon the analyses says that salicylic acid was present in 23 samples; one sample contained 45·6 grains per gallon, another 42 grains per gallon, and a third 21 grains per gallon. Mr. Lloyd refers to the Departmental Committee on Food Preservatives which was appointed in 1899, its report being issued in 1901. This committee made certain recommendations which have never been carried into effect; among these was the suggestion "that salicylic acid be not used in greater proportion than one grain per pint in liquid food."

THE PROPOSED SANATORIUM FOR CHILDREN.—In the autumn of last year an appeal was made in the public press for funds with which to establish a sanatorium for the treatment of children suffering from tuberculosis. The appeal, which was signed by Lord Cawdor, the Countess of Home, the Hon. Mrs. Wellesley, and Mr. Alfred Hoare, has resulted in the collection of about £1400. This sum is not large enough to start the erection of a permanent building but arrangements have been made for the accommodation in July of about ten children in a house adjoining the proposed site for the sanatorium at Holt in Norfolk under the charge of a matron and a local medical officer. The Invalid Children's Aid Association is co-operating in the matter and particulars as to admission should be addressed to the secretary of that association at Denison House, Vauxhall Bridge-road, London, S.W. This week the King has opened the sanatorium which bears his name and it must be a satisfaction to him to know that efforts are being made to supplement the good work which he has begun. Few, if any, of the existing sanatoriums take patients under 16 years of age, so that a children's sanatorium is greatly needed if tuberculosis is to be stamped out by the aid of these institutions. Donations and subscriptions may be sent to the honorary secretary, 42, Great Ormond-street, London, W.C., or may be paid to the Children's Sanatorium account at Messrs. Hoare and Co., 37, Fleet-street, London, E.C.

EPSOM COLLEGE.—At the last meeting of the governing body of Epsom College the following motion was unanimously carried:—

That the council of Epsom College accept with very great reluctance and regret the resignation of the treasurership by their valued colleague, Sir Constantine Holman, M.D., and beg to offer him their warmest thanks for the untiring care and zeal with which he has watched over the affairs of the institution and for the time and thought which he has devoted to its interests during the 19 years of his treasurership. They desire to record upon the minutes that it has been under his guidance that the College and the institution have been placed in a satisfactory position and to express their earnest hope that he will continue to give them the benefit of his wide experience for many years to come as a member of their body.

It was also resolved unanimously that a copy of the resolution, written on vellum and signed by all the members of the council, should be presented to Sir Constantine Holman.

THE "CHRISTIAN SCIENCE" CASE.—Bail was tendered last week and accepted by Mr. Curtis Bennett for Mr. Adcock who is charged with causing the death of Major Whyte.

Parliamentary Intelligence.

NOTES ON CURRENT TOPICS.

Medical Officers of Health and Sanitary Inspectors.

A BILL has been read a first time in the House of Commons to amend the law relating to the qualification and tenure of office of medical officers of health and sanitary inspectors. It has the support of Sir FRANCIS POWELL, Sir WALTER FOSTER, and Sir JOHN BATTY TUKE. In a memorandum it is explained that the main objects of this Bill are to insure that none but those properly qualified shall be appointed as medical officers of health or sanitary inspectors and to give all such officers and inspectors similar security in their tenure of office to that enjoyed by Poor-law medical officers and metropolitan medical officers of health. As the law stands no qualification is required for a sanitary inspector except in London and as a general rule a medical officer of health or a sanitary inspector is appointed from year to year only and thus has no true security of tenure. Poor-law medical officers and metropolitan officers of health are not appointed for limited periods only and are removeable only by, or with the consent of, the Local Government Board. Except in London, urban sanitary authorities have no legal power to appoint more than one sanitary inspector. It is desired to extend the metropolitan powers to all urban sanitary districts. In London the sanitary inspector is so called by law but outside London the law names him "inspector of nuisances." It is proposed that the London name shall be universally used. It is almost unnecessary to state that there is no chance of the Bill obtaining a second reading this session.

Vaccination Prosecutions.

The text of the Bill which has been introduced by several private members in reference to vaccination prosecutions shows that all that is proposed is contained in the following clause: "A vaccination officer shall not take proceedings against a parent or other person under section twenty-nine or section thirty-one of the Vaccination Act, 1867, except with the express sanction and authority in each case of the guardians of the union or parish for which he acts."

Army Medical Department.

The report of the Army Medical Department for 1904 was issued as a Blue-book on June 13th. It extends to about 500 pages. The average strength of European troops serving at home and abroad was 244,425. The total number of admissions to hospital was 159,644, the total deaths were 1592, and the total number of men finally discharged from the service on account of injuries and disease was 4778. The principal causes of admission were venereal affections, diseases of the digestive system, injuries, malarial fevers, diseases of the skin, and diseases of the respiratory system. The chief causes of death were: enteric fever, 433; injuries, 188; diseases of the digestive system, 187; diseases of the respiratory system, excluding tubercle of the lung, 147; and diseases of the circulatory system, 121. The invaliding records show that diseases of the circulatory system (862), diseases of the digestive system (749), diseases of the nervous system (635), diseases of organs of special sense (553) and tuberculous diseases (476) head the list in the case of men finally discharged as unfit for further service. Malarial fevers, debility,

enteric fever, Malta fever, and dysentery caused a great deal of invaliding from abroad, but in most of the cases change of climate greatly benefited the health of the men and good recoveries occurred. The admission, mortality, and constantly sick rates amongst the troops serving in the United Kingdom were 508·7, 2·92, and 29·26 per 1000 respectively, as compared with 586·9, 3·41, and 35·23 in 1903, and with 665·3, 4·29, and 38·68, the admission, death, and constantly sick rates for the decennial period 1894–1903. Part of the decrease in the admission rate is due to the extension of the practice of treating cases in barracks, some of which under the old rules would have been dealt with by admission to hospital. A further decrease in the death-rate is observed when compared with previous years and it is very satisfactory to note that there is a considerable difference between the mortality-rate for the year and the average death-rate for the decennial period 1894–1903. It must also be remembered that the death-rate represents not only sickness originating in the United Kingdom but that it is contributed to by disease contracted during service abroad, a fact which should not be forgotten in making comparisons with the statistics of foreign armies.

HOUSE OF COMMONS.

FRIDAY, JUNE 8TH.

The American Meat Scare.

Mr. FIELD asked the President of the Local Government Board whether he was aware that a quantity of boneless and pork meat was imported into Great Britain; whether he could state of what material it was composed; whether he was aware that this meat was used in the manufacture of sausages sold as English produce; whether he would communicate with the American Government respecting the allegations made concerning lard and boneless, tinned, and frozen meats; and whether he could state the methods employed in the inspection of this imported food.—Mr. JOHN BURNS replied: I am aware that a quantity of boneless beef and pork is imported into this country from the United States. I understand that it is composed of beef "chucks," "pork cuttings," "ham trimmings," and the like, and that it is used in the manufacture of sausages which are presumably sold without any declaration as to the sources from which the ingredients of which they are composed are derived. I understand that the law in the United States requires all shipments of meat and meat products to Europe to be passed by inspectors of the Department of Agriculture before clearance is given to the vessel by the Customs authorities and that the department has laid down elaborate regulations relative to the inspection of meat intended for export. Having regard, however, to the recent allegations referred to in the question, I have put myself into communication with my right honourable friend the Secretary of State for Foreign Affairs with a view to its being ascertained to what extent reliance can be placed on the system of meat inspection undertaken by the United States Bureau of Animal Industry. In this country imported lard and boneless and other meats are liable to the same inspection as other articles of food. There are circumstances affecting some of these imported foods which present serious difficulties in the way of efficient inspection but I am fully aware of the need for securing that the powers of inspection possessed by local authorities should be exercised as far as possible in these cases and I have recently caused inquiries to be made and action to be taken for this purpose.

MONDAY, JUNE 11TH.

Importation of American Meats.

Sir HOWARD VINCENT asked the President of the Board of Trade what was the total importation of American canned meats, game, fish, fruits, and other preserved foods into the United Kingdom and the British empire in the 12 months ending Dec. 31st, 1900 and 1905, respectively; and, having regard to the disclosures concerning the trade in the recent report of a United States Commission presented to Congress and the public strictures regarding it attributed to President Roosevelt, what steps he proposed to take to protect British consumers from the evil effects of partaking of such foods.—Mr. LLOYD GEORGE replied: The American trade returns show that the value of canned meat, fish, and fruit exported from the United States to the British empire in the year 1900–01 was £2,764,000, of which £2,234,000 went to the United Kingdom. The corresponding figures for the year 1904–06 were £2,465,000 to the British empire and £2,062,000 to the United Kingdom. As regards the last part of the question, which relates to a matter of public health, I am in communication with the Local Government Board and Customs, and I am informed that all practicable steps are, and will be, taken by the competent departments for the protection of British consumers. In this connexion I may refer to the reply given on June 8th by my right honourable friend the President of the Local Government Board to a question by the honourable Member for the St. Patrick division of Dublin.

BOOKS, ETC., RECEIVED.

BAILLIÈRE, TINDALL, AND COX, 8, Henrietta-street, Covent Garden, London, W.C.

Heart Disease and Aneurysm of the Aorta, with Special Reference to Prognosis and Treatment. By Sir William H. Broadbent, Bart., K.C.V.O., M.D. Lond., F.R.S., D.Sc. Leeds, LL.D. Edin. and St. Andrews, F.R.C.P., Physician in Ordinary to H.M. the King and to H.R.H. the Prince of Wales; and John F. H. Broadbent, M.A., M.D. Oxon., F.R.C.P., Physician to Outpatients, St. Mary's Hospital, Assistant Physician to the London Fever Hospital. Fourth edition. Price 12s. 6d. net.

Manual of Medicine. By Thomas Kirkpatrick Monro, M.A., M.D., Fellow of, and Examiner to, the Faculty of Physicians and Surgeons, Glasgow, Physician to the Glasgow Royal Infirmary, and Professor of Medicine in St. Mungo's College. Second edition. Price 15s. net.

CASSELL AND COMPANY, LIMITED, London, Paris, New York, and Melbourne.

A Nation's Youth. Physical Deterioration: its Causes and Some Remedies. By the Countess of Warwick, Author of "Warwick Castle." "The Life of Joseph Arch," &c. With an Introduction by Sir John E. Gorst. Price 1s. net.

A Handbook for Midwives and Maternity Nurses. By Comyns Berkeley, B.A., M.B., B.C. Cantab., M.R.C.P. Lond., M.R.C.S. Eng., Assistant Obstetric Physician to the Middlesex Hospital, Lecturer on Midwifery at the Middlesex Hospital Medical School. Price 5s.

CHURCHILL, J. AND A., 7, Great Marlborough-street, London, W.

Preservatives in Food and Food Examination. By John C. Thresh, M.D. Vict., D.Sc. Lond., F.I.C., Lecturer on Public Health, London Hospital Medical College, Medical Officer of Health, Essex County Council, &c.; and Arthur E. Porter, M.D., M.A. Cantab., Assistant Medical Officer of Health and Chief Sanitary Inspector, City of Leeds, Demonstrator of Public Health, Leeds University. Price 14s. net.

DOLLARD, LIMITED, Naval and Military Printers, Dublin.

War with Disease, being a Series of Lectures on Preventive Medicine, delivered to the Officers and N.C.O.'s of the Cavalry Brigade in Ireland, under the Command of General M. F. Rimington, C.B. By Fredk. F. MacCabe, M.B. Univ. Dubl., Surgeon-Lieutenant, South of Ireland Imperial Yeomanry; late Civil Surgeon, H.M. Field Force, South Africa. Price 6d. net.

GREEN, WILLIAM, AND SONS, Edinburgh and London.

Green's Encyclopedia and Dictionary of Medicine and Surgery. Vol. I.: Aachen to Brain. Price not stated.

Notes on Local Anæsthesia in General Surgery. By J. W. Struthers, M.B., F.R.C.S. Ed., Assistant Surgeon, Leith Hospital; Surgeon to the New Town Dispensary, Edinburgh. Price not stated.

HERRICK BOOK AND STATIONERY CO., Denver, Colo., U.S.A.

The Ophthalmic Year-Book. Volume III. Containing a Digest of the Literature of Ophthalmology, with Index of Publications for the year 1905. By Edward Jackson, A.M., M.D., Professor of Ophthalmology in the University of Colorado; and George E. de Schweinitz, A.M., M.D., Professor of Ophthalmology in the University of Pennsylvania. Price not stated.

JOHN BALE, SONS, AND DANIELSSON, LIMITED, 83–91, Great Titchfield-street, Oxford-street, London, W.

The Operative Treatment of Prolapse and Retroversion of the Uterus. By J. Inglis Parsons, M.D., M.R.C.P., M.R.C.S., Physician to the Chelsea Hospital for Women. Price 3s. 6d. net.

The Urethrotomies and Kidney Capsulotomy in Diseases and Injuries of the Urinary Organs. By Reginald Harrison, F.R.C.S., Past Vice-President and Hunterian Professor of Pathology and Surgery, Royal College of Surgeons. Price 2s. 6d. net.

LEWIS, H. K., 136, Gower-street, London, W.C.

Catarrhal Fevers, commonly called Colds; Their Causes, Consequences, Control, and Cure. By R. Prosser White, M.D. Ed., M.R.C.S. Eng., Life Vice-President and Honorary Medical Officer, Royal Albert Edward Infirmary, Wigan; Honorary Life Member, St. John's Ambulance Association; Vice-President of the Factory Surgeons' Association. Price 4s.

Clinical Bacteriology and Hæmatology for Practitioners. By W. D'Este Emery, M.D., B.Sc. Lond., Clinical Pathologist to King's College Hospital and Pathologist to the Children's Hospital, Paddington Green. Being the second edition of "A Handbook of Bacteriological Diagnosis for Practitioners." Price 7s. 6d. net.

The Combined Treatment in Diseases of the Eye. By G. Herbert Burnham, M.D. Tor., F.R.C.S. Edin., M.R.C.S. Eng., Professor of Ophthalmology and Otology at the University of Toronto. Price 3s.

The Public Health Acts and Other Sanitary Laws and Regulations. Specially Prepared for the Diploma of Public Health. By Martin Elliott, of the Middle Temple and Western Circuit, Barrister-at-Law; and Gilbert Elliott, M.R.C.S. E., L.R.C.P., D.P.H. Lond., D.T.M. Camb. Price 5s. net.

MACMILLAN AND CO., LIMITED, London.

A System of Gynæcology. By Many Writers. Edited by Thomas Clifford Allbutt, M.A., M.D., LL.D., F.R.S., Hon. D.Sc. Oxon., &c., Regius Professor of Physic in the University of Cambridge; W. S. Playfair, M.D., LL.D., F.R.C.P., Professor of Obstetric Medicine in King's College and Obstetric Physician to King's College Hospital; and Thomas Watts Eden, M.D. Edin., F.R.C.P. Lond., Assistant Obstetric Physician, Charing Cross Hospital. Price 25s. net.

MACMILLAN COMPANY, THE, New York. (MACMILLAN AND CO., LIMITED, London.

The Vine of Sibmah. A Relation of the Puritans. By Andrew Macphail. Price 6s.

METHUEN AND CO., 36, Essex-street, London, W.C.

The Royal Society; or, Science in the State and in the Schools. By Sir William Huggins, K.C.B., O.M., D.C.L., LL.D., Sc.D., F.R.S., &c. Price 4s. 6d. net.

Infant Mortality. A Social Problem. By George Newman, M.D., D.P.H., F.R.S.E., Lecturer on Public Health at St. Bartholomew's Hospital, London; Medical Officer of Health of Metropolitan Borough of Finsbury. Price 7s. 6d. net.

MURRAY, JOHN, 50A, Albemarle-street, W.

Problems in Animal Metabolism. A Course of Lectures given in the Physiological Laboratory of the London University at South Kensington in the Summer Term, 1904. By J. B. Leathes, Lecturer on Physiology in the Medical School of St. Thomas's Hospital. Price 7s. 6d. net.

NEW SYDENHAM SOCIETY, London. (Agent: H. K. LEWIS, 136, Gower-street, London, W.C.)

An Atlas of Illustrations of Clinical Medicine, Surgery, and

Pathology. Compiled for the New Sydenham Society (a continuation of the "Atlas of Pathology"), chiefly from original sources. Fasciculus XXV. (double number), being XX. and XXI. of the Clinical Atlas. Small-pox. Price to non-subscribers one guinea.

REBMAN, LIMITED, 129, Shaftesbury-avenue, London, W.C.

The Development of the Human Body. A Manual of Human Embryology. By J. Playfair McMurrich, A.M., Ph.D., Professor of Anatomy in the University of Michigan. Second edition, revised, and enlarged. Price 14s. net.

Minor and Operative Surgery, including Bandaging. By Henry R. Wharton, M.D., Professor of Clinical Surgery in the Woman's Medical College of Pennsylvania. Sixth edition, enlarged, and thoroughly revised. Price 14s. net.

The Ophthalmoscope and How to Use it. With Coloured Illustrations, Descriptions, and Treatment of the Principal Diseases of the Fundus. By James Thorington, A.M., M.D., Professor of Diseases of the Eye in the Philadelphia Polyclinic and College for Graduates in Medicine. Price 11s. net.

The Surgical Treatment of Chronic Suppuration of the Middle Ear and Mastoid. By Seymour Oppenheimer, M.D., Otologist and Laryngologist to Gouverneur Hospital; Otologist and Laryngologist to Mount Sinai Hospital Dispensary. Price 27s. 6d. net.

SANITARY PUBLISHING CO., LIMITED, London. (W. ERSKINE MAYNE, Belfast.)

Experiments on Hot Water Systems. By A. Sayers, Lecturer on Plumbing, Municipal Technical Institute, Belfast. With Prefatory Statement by F. C. Forth, A.R.C.Sc.I., Principal, Municipal Technical Institute, Belfast. Revised and reprinted from "The Plumber and Decorator." Price 3s. net.

THACKER, SPINK, AND CO., Government-place, Calcutta.

The Management of a Plague Epidemic and the Principles on Which it Should be Based. By E. F. Gordon Tucker, Captain, Indian Medical Service, Civil Surgeon, Surat. Price R. 1.8.

TREAT, E. B. AND CO., 241-243, West 23d Street, New York.

Transactions of the American Pediatric Society. Seventeenth Session. Held at Hotel Sagamore, Lake George, N.Y., June 19th, 20th, and 21st, 1905. Edited by Linnæus Edford La Fétra, M.D. Volume XVII. Reprinted from "Archives of Pediatrics," 1905-06. Price not stated.

UNIVERSITY COLLEGE, London.

Descriptive Catalogue of the Specimens Illustrating Surgical Pathology in the Museum of University College, London. New edition. By Raymond Johnson, B.S., F.R.C.S., Surgeon to University College Hospital; and T. W. P. Lawrence, M.B., F.R.C.S., Curator of the Museum. Part III. (Copies may be obtained at the Office of the College.) Price not stated.

UNIVERSITY PRESS, Manchester. (SHERRATT AND HUGHES, 60, Chandos-street, London, W.C.)

Archives of the Public Health Laboratory of the University of Manchester. Edited by A. Sheridan Delepine, M.Sc., M.B., Ch.M., Director of the Laboratory and Procter Professor of Comparative Pathology and Bacteriology. Vol. I. Price, paper, 21s. net.; cloth, 22s. net.

Course of Instruction in Operative Surgery in the University of Manchester. By Wm. Thorburn, B.S. Lond., F.R.C.S., Lecturer in Operative Surgery. Price 2s. 6d. net.

WILEY, JOHN AND SONS, New York. (CHAPMAN AND HALL, LIMITED, London).

Collected Studies on Immunity. By Professor Paul Ehrlich, Privy Councillor and Director of the Royal Institute for Experimental Therapy, Frankfurt, Germany, and by his Collaborators. With several new Contributions, including a Chapter written expressly for this edition by Professor Ehrlich. Translated by Dr. Charles Bolduan, Professor of Bacteriology and Hygiene in Fordham University, N.Y. First edition. First thousand. Price, cloth, $6.00, or 25s. 6d. net.

WHITTAKER AND CO., 2, White Hart-street, Paternoster-square, London, E.C.

A Text-book of Botany. For the Use of Students Preparing for the Civil Service, London University, Cambridge Local, Oxford Local, College of Preceptors, and South Kensington Examinations. By M. Yates. Part I.: "The Anatomy of Flowering Plants." Price 2s. 6d. net.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week, such information for gratuitous publication.*

ALEXANDER, G. D., M.R.C.S., L.R.C.P. Lond., has been appointed to the Ear Department at St. Thomas's Hospital.

ATKINSON, E. L., M.R.C.S., L.R.C.P. Lond., has been appointed Junior Obstetric House Physician at St. Thomas's Hospital.

BRAUND, JAMES MONTAGUE, M.R.C.S., L.S.A., has been re-appointed Medical Officer of Health of the Stratton (Cornwall) Rural District.

BREBNER, C. S., M.D. Edin., D.P.H. Camb., has been appointed Medical Officer to the Education Authority, Widnes.

COLLINSON, HAROLD, M.B., B.S. Lond., F.R.C.S. Eng., has been appointed Surgical Registrar to the General Infirmary, Leeds.

COOPER, C. T., M.B., Ch.B. Melb., has been appointed Physician to Out-patients at the Children's Hospital, Adelaide, South Australia.

COX, R. J. H., M.R.C.S., L.R.C.P. Lond., has been appointed House Surgeon to Out-Patients at St. Thomas's Hospital.

EYRE, C. R. B., M.R.C.S., L.R.C.P. Lond., has been appointed Senior Ophthalmic House Surgeon at St. Thomas's Hospital.

GIBBS, S. R., M.R.C.S., L.R.C.P. Lond., has been appointed Senior Obstetric House Physician at St. Thomas's Hospital.

GOTELEE, H. R., M.R.C.S., L.R.C.P. Lond., has been appointed Junior Ophthalmic House Surgeon at St. Thomas's Hospital.

GUNSON, J. B., M.B., Ch.B. Adel., has been appointed Physician to Out-patients at the Children's Hospital, Adelaide, South Australia.

HEWETT, F. S., M.R.C.S., L.R.C.P. Lond., has been appointed House Surgeon to Out-Patients at St. Thomas's Hospital.

HOWARTH, W. G., M.B., B.C. Cantab., has been appointed House Surgeon to Out-patients at St. Thomas's Hospital.

HOWITT, A. B., M.R.C.S., L.R.C.P. Lond., has been appointed House Surgeon to Out-Patients at St. Thomas's Hospital.

KITCHEN, H. E., M.R.C.S., L.R.C.P., has been appointed House Surgeon to the Tottenham Hospital, London, N.

LANGLEY, ALFRED FARDON, M.D., C.M. McGill, L.R.C.P., L.R.C.S., L.M. Edin., L.F.P.S. Glasg., has been appointed District Medical Officer by the Bath Board of Guardians.

LOUGHBOROUGH, A. L., M.R.C.S., L.R.C.P. Lond., has been appointed to the Ear Department at St. Thomas's Hospital.

MACDONALD, S. G., M.R.C.S., L.R.C.P. Lond., has been appointed to the Throat Department and to the Children's Surgical Department at St. Thomas's Hospital.

NEWLAND, H. SIMPSON, M.B., M.S. Adel., has been appointed Surgeon to Out-patients at the Children's Hospital, Adelaide, South Australia.

NIESCHE, FREDERICK WILLIAM, M.D. Edin., Inspector of Anatomy, has been appointed to superintend the School of Anatomy of the University of Adelaide, South Australia.

PAGE, C. M., M.R.C.S., L.R.C.P. Lond., has been appointed to the Children's Surgical Department at St. Thomas's Hospital.

RIDOUT, C. A. SCOTT, M.S. Lond., F.R.C.S. Eng., has been appointed Surgeon to the Aural and Throat Department of the Portsmouth and South Hants Eye and Ear Infirmary.

WALKER, THOMAS WARBURTON, M.B., Ch.B. Vict., has been appointed District Medical Officer by the Tetbury (Gloucestershire) Board of Guardians.

WALLACE, J., M.R.C.S., L.R.C.P. Lond., has been appointed to the Skin Department at St. Thomas's Hospital.

WATSON, GEORGE W., M.D. Lond., M.R.C.P., has been appointed Medical Registrar to the General Infirmary, Leeds.

WEBB, G. L., B.C. Cantab., M.R.C.S., L.R.C.P. Lond., has been appointed to the Skin Department at St. Thomas's Hospital.

WHITEHOUSE, H. B., M.R.C.S., L.R.C.P. Lond., has been appointed to the Throat Department at St. Thomas's Hospital.

Vacancies.

For further information regarding each vacancy reference should be made to the advertisement (see Index).

BELGRAVE HOSPITAL FOR CHILDREN, Clapham-road, S.W.—Assistant Physician.

BLACKBURN AND EAST LANCASHIRE INFIRMARY.—Junior House Surgeon. Salary £70 per annum, with board, washing, &c.

BOLTON INFIRMARY AND DISPENSARY.—Junior House Surgeon. Salary £100 per annum, with apartments, board, and attendance.

BRECKNOCK COUNTY AND BOROUGH INFIRMARY.—Resident House Surgeon, unmarried. Salary £100 per annum, with apartments, board, attendance, fire, and gas.

BRIGHTON THROAT AND EAR HOSPITAL, Church-street, Queen's-road.—Non-resident House Surgeon for six months, renewable. Salary at rate of £75 per annum.

CARDIFF ASYLUM.—Medical Superintendent. Salary £650 a year, with unfurnished house, light, coal, vegetables, and washing.

CARDIFF, UNIVERSITY COLLEGE OF SOUTH WALES AND MONMOUTHSHIRE.—Lecturer on Materia Medica and Pharmacology.

EAST LONDON HOSPITAL FOR CHILDREN AND DISPENSARY FOR WOMEN, Shadwell, E.—House Physician for six months. Honorarium of £25, with board, residence, and laundry.

EGYPTIAN GOVERNMENT, MINISTRY OF EDUCATION.—Professor of Midwifery and Gynæcology. Salary £400 a year. Also Medical Tutor and Registrar to Kasr-el-Ainy Hospital. Salary £400 a year.

EVELINA HOSPITAL FOR SICK CHILDREN, Southwark, S.E.—Assistant House Surgeon. Salary £70, with board, residence, and washing. Also Radiographer. Salary £50 per annum. Also Clinical Assistants.

EXMINSTER, DEVON COUNTY ASYLUM.—Assistant Medical Officer. Salary £140, with board, lodging, washing, and attendance.

FULBOURN, NEAR CAMBRIDGE, LUNATIC ASYLUM.—Senior Assistant Medical Officer, unmarried. Salary £150 per annum, with board, lodging, and attendance.

GLOUCESTER GENERAL INFIRMARY AND EYE INSTITUTION.—Assistant House Surgeoncy for six months. Salary at rate of £30 per annum, with board, residence, and washing.

GRAVELLY HILL, NEAR BIRMINGHAM, JAFFRAY BRANCH OF THE GENERAL HOSPITAL.—Resident Medical and Surgical Officer. Salary £150 per annum, with board, residence, and washing.

GREENOCK INFIRMARY.—Assistant House Surgeon. Salary £40 per annum, with board and residence.

GRIMSBY AND DISTRICT HOSPITAL.—Resident House Surgeon. Salary £100 per annum, with board, lodging, and washing.

HOSPITAL FOR DISEASES OF THE THROAT, Golden-square, W.—Honorary Assistant Surgeon.

HOSPITAL FOR SICK CHILDREN, Great Ormond-street, London, W.C.—House Surgeon, unmarried, for six months. Salary £20, with board and residence.

INDIAN MEDICAL SERVICE.—Examination for not less than Twenty Commissions.

ITALIAN HOSPITAL, Queen-square, London, W.C.—Honorary Ophthalmic Surgeon.

LEEDS, CITY OF, SANITARY COMMITTEE.—Assistant Medical Officer of Health and Chief Inspector of Nuisances. Salary £300 per annum.

LEICESTER INFIRMARY.—Refraction Assistant to the Ophthalmic Department.

LONDON HOSPITAL, Whitechapel, E.—Medical Registrarship.
LONDON (ROYAL FREE HOSPITAL) SCHOOL OF MEDICINE FOR WOMEN, 8, Hunter-street, W.C.—Second Demonstrator of Anatomy.
LONDON TEMPERANCE HOSPITAL.—Assistant House Surgeon for six months. Honorarium at rate of £75 per annum.
METROPOLITAN HOSPITAL, Kingsland-road, N.E.—Senior House Surgeon for three months. Salary at rate of £40 per annum, with board, laundry, &c.
NEW HOSPITAL FOR WOMEN, Euston-road, N.W.—Two House Surgeons (females). Also Clinical Assistant.
NORTHAMPTON GENERAL HOSPITAL.—Assistant House Surgeon. Salary £50 a year, with apartments, board, washing, and attendance.
NORTH-EASTERN HOSPITAL FOR CHILDREN, Hackney-road, E.—House Physician for six months. Salary at rate of £60 per annum, with board, residence, and laundry.
POPLAR HOSPITAL FOR ACCIDENTS, Poplar, E.—Senior House Surgeon. Salary £135 per annum, with board and residence.
ROYAL LONDON OPHTHALMIC HOSPITAL, City-road, E.C.—Refraction Assistant. Salary £25 a year, with lunch.
ROYAL VETERINARY COLLEGE, Camden Town.—Professor of Biology. Also Lecturer on Physics.
ROYAL WATERLOO HOSPITAL FOR CHILDREN AND WOMEN, Waterloo-road, S.E.—Honorary Dental Surgeon.
ST. BARTHOLOMEW'S HOSPITAL AND COLLEGE.—Demonstrator of Chemistry. Also Demonstrator of Physics. Salary in each case £150 per annum.
SHEFFIELD CHILDREN'S HOSPITAL.—Honorary Medical Officer.
STAFFORD, STAFFORDSHIRE GENERAL INFIRMARY.—Assistant House Surgeon for six months. Honorarium £41, with board, residence, and laundry.
STROUD GENERAL HOSPITAL.—House Surgeon. Salary £80 per annum, with board, lodging, and washing.
WADSLEY, NEAR SHEFFIELD, WEST RIDING ASYLUM.—Fifth Assistant Medical Officer. Salary £140, rising to £160, with board, &c.
WOLVERHAMPTON AND MIDLAND COUNTIES EYE INFIRMARY.—House Surgeon. Salary £70 per annum, with rooms, board, and washing.
WORCESTER GENERAL INFIRMARY.—House Physician. Salary £80 per annum, with board and residence.

Births, Marriages, and Deaths.

BIRTHS.

GODWIN.—On June 7th, at 35, Southgate-street, Winchester, the wife of Herbert James Godwin, M.B., F.R.C.S., of a daughter.
EVERETT.—On June 1st, at Hadleigh, Suffolk, the wife of H. F. Everett, L.R.C.P., &c., of a son.
MURPHY.—On June 5th, at Waterloo-crescent, Dover, the wife of Charles E. Murphy, F.R.C.S., L.R.C.P., of a daughter.
NEWMAN.—On June 5th, at Windhill, Bishop's Stortford, the wife of J. C. Newman, F.R.C.S., of a son.
PEARSE.—On June 11th, at St. George's-terrace, Trowbridge, the wife of James Pearse, M.D., of a daughter.

MARRIAGES.

BAKER—CHATTERTON.—On June 7th, at Christ Church, Lancaster-gate, Dr. Alfred Eaton Baker, to Edith Francis, second daughter of Horace W. Chatterton.
CLEVELAND—PEEBLES.—On June 6th, at Albury, Guildford, by the Rev. A. P. Thompson, assisted by the Rev. H. E. Crowley, rector, and Rev. W. B. Norris, rector of Warblington, John Wheeler Cleveland, M.R.C.S., Clarence-road, St. Albans, only son of the late Lieutenant-Colonel G. D. D. Cleveland, 98th Regiment, to Annie Rhoda Maskell, fourth daughter of Mr. Andrew Peebles, of Albury, Guildford, and Lundin Links, Fife, N.B.
JOHNSON—BOLTON.—On June 14th, at St. James's Church, Hope, by the Rev. H. S. Taggart, M.A., and Rev. R. P. Willock, M.A. (vicar), William Crosby Johnson, M.B., Ch.B., only son of Thomas Mason Johnson, M.D. J.P., Oakfield, Pendleton, to Florence Lucy, younger daughter of J. J. Bolton, Esq., J.P., Heathfield, Lancaster-road, Pendleton. At home, Fairleigh, Hope Avenue, during September.
MOLESWORTH—UPTON.—On June 6th, at St. Marylebone Church, Marylebone-road, W., Theodore Henderson Molesworth, B.A., M.B. Cantab., F.R.C.S., to Ethel Alexandra (Dolly), youngest daughter of Edward Upton.
UPCOTT—WEEKES.—On June 9th, at St. Barnabas, Kensington, Harold Upcott, F.R.C.S., to Alice Weekes.
YEARSLEY—SECKENDORFF.—On June 14th, at St. Thomas's, Orchard-street, by the Rev. R. O. Yearsley, cousin of the bridegroom, assisted by the Vicar, Percival Macleod Yearsley, F.R.C.S., F.Z.S., Senior Surgeon to the Royal Bar Hospital, to Lavinia Rose, widow of the late Siegmund Seckendorff, Esq.

DEATHS.

FLETCHER.—On June 10th, at Zeidab, near Khartoum, Harold Venour Fletcher, Civil Engineer, younger son of Dr. George Fletcher, J.P., of Highgate, aged 26.
HAYWARD.—On the 8th of June, at Haydock, St. Helens, Lancs., Thomas Ernest Hayward, M.B. Lond., F.R.C.S. Eng., M.O.H. for Haydock. Interred at Newton-le-Willows Cemetery on Tuesday, 12th of June.
MCCUTCHAN.—On June 9th, at the Nursing Hostel, Cambridge, William Arthur McCutchan, L.R.C.P., &c.
VINRACE.—John Hinks Vinrace, M.B. Lond., M.R.C.P. Lond., of 88, Gower-street, London, on May 31st, aged fifty, eldest son of John Vinrace, M.D., Moseley, Birmingham.

N.B.—A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.

Notes, Short Comments, and Answers to Correspondents.

QUACKS AND ABORTION.

IN THE LANCET of May 19th we referred under the title above given to some disgraceful advertisements which had appeared in the issue of March 24th of a journal called *Brighton and Hove Society*. The advertisements were those of abortifacients and other preparations sold by a man named Boutall. We now have before us the cover of *Brighton and Hove Society* of June 9th, from which we are pleased to notice the absence of Boutall's advertisement but we still find the advertisements of "Dr." Davis's Female Pills and of Towle's Pennyroyal and Steel Pills for Females. Both these nostrums are sold practically as abortifacients, and we commend to the notice of the editor of *Brighton and Hove Society* what we said about "Dr." Davis in THE LANCET of Dec. 31st, 1898, p. 1808, and about both Davis and Towle in THE LANCET of April 26th, 1902, p. 1224. Besides these advertisements we see another disgraceful one headed "Vitality, How Lost, How Regained." This relates to a book which is evidently the usual quack filth about spermatorrhœa. It may be obtained at Gould's laboratory, Bradford. We are all the more astonished to see such advertisements in the columns of *Brighton and Hove Society*, inasmuch as in the issue of May 12th is a leading article entitled "To Love, Honour, and Obey" which contains most excellent sentiments about marriage, its solemnity, and the necessity for love. In the same number we see Boutall's advertisements, as well as those of Towle and Davis, to say nothing of the Vitality one. Somehow quinine cones, pink regulators, and the pills of Towle and Davis do not seem to us consonant with the high sentiments expressed in the leading article.

THE COST OF LUNACY.

To the Editors of THE LANCET.

SIRS,—Will you kindly permit me to draw the attention of the ratepayers in England and Wales to the following extraordinary figures dealing with certified pauper lunacy taken from the thirty-fourth annual report of the Local Government Board, pp. 460 and 461? From 1880 to 1904, a period of 25 years, I find that the nation has spent no less a sum than £36,264,702 sterling on pauper lunacy. The report only carries us to 1904, but if we assume the cost for 1905 and 1906 to be the same as 1904—a very moderate computation, seeing that since 1880 the cost has been regularly increasing annually—we get a total to date, a period of 27 years, of over £41,000,000 sterling as the cost of pauper lunacy. Sirs, there must be something radically wrong somewhere; this is self-evident and needs no demonstration. On p. 445 of the same report we find that the number of lunatics has jumped from 65,345 in 1881 to 109,100 in 1905. A more recent return puts the number to date at 120,000 souls afflicted with the scourge of insanity. Thanking you in anticipation,

I am, Sirs, yours faithfully,
H. R. GAWEN GOGAY,
June 12th, 1906. Ex-Guardian, St. Saviour's Union, London, S.E.

ANIMAL PREPARATIONS IN CHEMICAL LABORATORIES.

To the Editors of THE LANCET.

SIRS,—In view of the great interest being taken at the present time in regard to animal products and the natural anxiety in the public mind, we wish to state with all the emphasis at our command that it is quite impossible for any of the medicinal products issuing from our laboratory to be contaminated with pathogenic organisms. The precautions taken in the way of inspection of the glands, &c., before they are made use of, the aseptic methods of preparation, and the bacteriological and microscopical, as well as the physiological and chemical, tests employed are such as to make it an absolute impossibility for any disease-bearing germs to be found in any of the active principles or extractives from animal sources made by us.

We are, Sirs, yours faithfully,
Per pro PARKE, DAVIS, AND CO.,
London, E.C., June 9th, 1906. F. M. FISK, Manager.

P.S.—If any member of the medical profession who proposes to attend the forthcoming meeting of the British Medical Association at Toronto, August 21st to 25th, cares to extend his tour to Detroit an opportunity would be afforded him of inspecting our biological and pharmaceutical laboratories. Application should be made to our London office, 111, Queen Victoria-street.

LIEBIG'S EXTRACT OF MEAT COMPANY, LIMITED.

THE forty-first ordinary general meeting of this company was held at Cannon-street Hotel on June 12th, Mr. Charles E. Gunther, the chairman, presiding. After dealing with the figures in the balance-sheet, the chairman reported the purchase of several estancias, bringing the acreage of the company's cattle farms up to 1,074,900 acres, carrying a stock of 185,000 head. He also reported the shipment of a number of pedigree stud cattle, including some Herefords from His

Majesty's farms at Windsor. Referring to the recent reports which had appeared in the papers regarding alleged irregularities in packing canned meats in Chicago, the chairman said that he thought that any discussion of the matter would benefit the company's trade, all their manufacturing departments in the River Plate being carried on under the strictest scientific control. Tuberculosis is almost unknown in the River Plate where the company's cattle farms are situated, the animals pass expert veterinary examination before entering the factory, and the carcasses are again inspected by a chemist after killing. The process of manufacture from beginning to end is controlled by expert chemists, while as an additional safeguard every batch of "Lemco" and "Oxo" is analysed and tested both at the works and in Europe before it reaches the trade. The company has the use of an unlimited supply of water, the river at Fray Bentos being about four miles wide, and during the time killing is in progress hoses play upon the tiled floors and at the conclusion of each day's slaughter the whole place is thoroughly flushed down and left spotlessly clean.

THE A. E. JONES FUND.

To the Editors of THE LANCET.

SIRS,—The following additional subscriptions have been received. Will those gentlemen who have not yet forwarded their subscriptions kindly do so as soon as possible, as the list will be closed next week?

I am, Sirs, yours faithfully,

45, Queen Anne-street, W., June 12th, 1906. C. WYNN WIBGMAN.

	£	s.	d.		£	s.	d.
Sir Thomas Barlow, Bart.	3	3	0	Mr. William Jones	1	1	0
Per Mr. R. Jones	3	3	0	Dr. D. N. Nabarro	1	1	0
Dr. Herbert Tilley	2	2	0	Dr. Guthrie Rankin ...	1	1	0
Dr. Sidney Bree	1	1	0	Anonymous	1	1	0

AN AIR-TIGHT GLASS STOPPER WITHOUT RUBBER OR CORK RING.

EXCELLENT agents as are rubber and cork for the purpose of preserving liquids from contact with air they do not make ideal stoppers because both, but especially the former, have a tendency to taint the liquid. Innumerable devices have been suggested which have aimed at minimising the contact of the rubber with the liquid but in a stopper recently submitted to us by Mr. Charles Noble of 315, Birkbeck Bank Chambers, Holborn, London, W.C., the use of cork or rubber is dispensed with entirely. The stopper consists really of a glass cone pressing on to a cup on the top of the bottle, both of which are very accurately ground so as to form a perfectly tight joint. The top of the stopper above the cone has a screw cut into it which engages a strong stout wire, the latter being kept firmly in position by being clamped on to the neck of the bottle in the same way as the spring clasp of those bottles which are used in the sterilisation of milk. By this contrivance the accurately fitting glass cone may be firmly pressed on to the cup by giving a few turns to the stopper. Glass is thus the only seal and according to some experiments which we made it proves to be an effectual one. Thus some aerated water placed in the bottle retained its gas under pressure for several days, no leakage either of gas or water taking place in spite of the pressure. This stopper therefore has none of the objections appertaining to cork and rubber when used wholly or partly for the purpose, the only material with which the contents of the bottle can come into contact being glass.

SHERRY.

Mr. A. Keyser, British consul at Cadiz, in his annual report to the Foreign Office, observes that the export of sherry does not increase. The looked-for revival in the United Kingdom has not yet commenced. There is nothing new to record concerning the demand for this product of Jerez, "yet for that reason it is well to repeat once more that tastes in wine cannot be directed, and cultivators of the grape and shippers must wait their turn, which came and went and is now, it is hoped, to come again. No one in Jerez can desire better advertisement than the healthy inhabitants among all classes, of whom sherry is the ordinary drink. It is a local saying that in Jerez gout and rheumatism are ills unknown."

HOLIDAY GUIDES.

WE have received from the Health Resorts Association copies of guides to Deal, Clifton, Llandrindod Wells, Southport, Weston-super-Mare, Weymouth, and Woodhall Spa. Any of these publications, which are well printed and illustrated and contain valuable information for visitors to these health resorts, can be obtained post free by applying to the town clerk at any of the places mentioned.

Roslin does not intrust us with his name and address but had his communication been signed we should still have been unable to answer it. The symptoms which he describes are very common; the condition is one upon which his medical man can advise him; and THE LANCET is not a bureau for the dissemination of gratuitous medical advice.

COMMUNICATIONS not noticed in our present issue will receive attention in our next.

Medical Diary for the ensuing Week.

OPERATIONS.

METROPOLITAN HOSPITALS.

MONDAY (18th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), St. George's (2 P.M.), St. Mary's (2.30 P.M.), Middlesex (1.30 P.M.), Westminster (2 P.M.), Chelsea (2 P.M.), Samaritan (Gynæcological, by Physicians, 2 P.M.), Soho-square (2 P.M.), City Orthopædic (4 P.M.), Gt. Northern Central (2.30 P.M.), West London (2.30 P.M.), London Throat (9.30 A.M.), Royal Free (2 P.M.), Guy's (1.30 P.M.), Royal Ear (2 P.M.), Children, Gt. Ormond-street (3 P.M.).

TUESDAY (19th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), Guy's (1.30 P.M.), Middlesex (1.30 P.M.), Westminster (2 P.M.), West London (2.30 P.M.), University College (2 P.M.), St. George's (1 P.M.), St. Mary's (1 P.M.), St. Mark's (2.30 P.M.), Cancer (2 P.M.), Metropolitan (2.30 P.M.), London Throat (9.30 A.M.), Samaritan (9.30 A.M. and 2.30 P.M.), Throat, Golden-square (9.30 A.M.), Soho-square (2 P.M.), Chelsea (2 P.M.), Central London Throat and Ear (2 P.M.), Children, Gt. Ormond-street (2 P.M., Ophthalmic, 2.15 P.M.).

WEDNESDAY (20th).—St. Bartholomew's (1.30 P.M.), University College (2 P.M.), Royal Free (2 P.M.), Middlesex (1.30 P.M.), Charing Cross (3 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), King's College (2 P.M.), St. George's (Ophthalmic, 1 P.M.), St. Mary's (2 P.M.), National Orthopædic (10 A.M.), St. Peter's (2 P.M.), Samaritan (9.30 A.M. and 2.30 P.M.), Gt. Northern Central (2.30 P.M.), Westminster (2 P.M.), Metropolitan (2.30 P.M.), London Throat (9.30 A.M.), Cancer (2 P.M.), Throat, Golden-square (9.30 A.M.), Guy's (1.30 P.M.), Royal Ear (2 P.M.), Royal Orthopædic (3 P.M.), Children, Gt. Ormond-street (9.30 A.M., Dental, 2 P.M.).

THURSDAY (21st).—St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), University College (2 P.M.), Charing Cross (3 P.M.), St. George's (1 P.M.), London (2 P.M.), King's College (2 P.M.), Middlesex (1.30 P.M.), St. Mary's (2.30 P.M.), Soho-square (2 P.M.), North-West London (2 P.M.), Gt. Northern Central (Gynæcological, 2.30 P.M.), Metropolitan (2.30 P.M.), London Throat (9.30 A.M.), Samaritan (9.30 A.M. and 2.30 P.M.), Throat, Golden-square (9.30 A.M.), Guy's (1.30 P.M.), Royal Orthopædic (9 A.M.), Royal Ear (2 P.M.), Children, Gt. Ormond-street (2.30 P.M.).

FRIDAY (22nd).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), Guy's (1.30 P.M.), Middlesex (1.30 P.M.), Charing Cross (3 P.M.), St. George's (1 P.M.), King's College (2 P.M.), St. Mary's (2 P.M.), Ophthalmic (10 A.M.), Cancer (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (2.30 P.M.), West London (2.30 P.M.), London Throat (9.30 A.M.), Samaritan (9.30 A.M. and 2.30 P.M.), Throat, Golden-square (9.30 A.M.), City Orthopædic (2.30 P.M.), Soho-square (2 P.M.), Central London Throat and Ear (2 P.M.), Children, Gt. Ormond-street (9 A.M., Aural, 2 P.M.), St. Mark's (2.30 P.M.).

SATURDAY (23rd).—Royal Free (9 A.M.), London (2 P.M.), Middlesex (1.30 P.M.), St. Thomas's (2 P.M.), University College (9.15 A.M.), Charing Cross (2 P.M.), St. George's (1 P.M.), St. Mary's (10 P.M.), Throat, Golden-square (9.30 A.M.), Guy's (1.30 P.M.), Children, Gt. Ormond-street (9.30 A.M.).

At the Royal Eye Hospital (2 P.M.), the Royal London Ophthalmic (10 A.M.), the Royal Westminster Ophthalmic (1.30 P.M.), and the Central London Ophthalmic Hospitals operations are performed daily.

SOCIETIES.

SATURDAY (23rd).—SOCIETY FOR THE STUDY OF DISEASE IN CHILDREN (Radcliffe Infirmary, Oxford).—3 P.M. Country Meeting. Papers by Dr. G. Carpenter, Dr. B. Rogers, Dr. R. C. Williams, Dr. Collis, Dr. A. G. Gibson, and Dr. H. Croly. Exhibition of Clinical Cases, Pathological and Anatomical Specimens.

LECTURES, ADDRESSES, DEMONSTRATIONS, &c.

MONDAY (18th).—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—4 P.M. Dr. T. C. Fox: Clinique. (Skin). 5.15 P.M. Lecture:—Dr. L. Williams: High Arterial Tension and Some of its Consequences.

POST-GRADUATE COLLEGE (West London Hospital, Hammersmith-road, W.).—10 A.M. Medical and Surgical Wards. Dr. Low: Tropical Medicine. 11 A.M. Minor Operations. 12 noon. Dr. Low: Pathological Demonstration. 2 P.M. Medical and Surgical Clinics. 2.30 P.M. Operations. Eye. 3 P.M. Dr. Hood: Demonstration in Medical Wards. 5 P.M. Dr. Davis: Tuberculosis of the Larynx.

LONDON SCHOOL OF CLINICAL MEDICINE (Dreadnought Hospital, Greenwich).—2.30 P.M. Operations. Sir D. Duckworth: Medicine. 3.15 P.M. Mr. W. Turner: Surgery. 4 P.M. Dr. StClair Thomson: Throat and Ear. Out-patient Demonstrations:—10 A.M. Surgical and Medical. 12 noon. Ear and Throat.

CHARING CROSS HOSPITAL.—4 P.M. Mr. Waggett: Demonstration (Aural). (Post-Graduate Course.)

TUESDAY (19th).—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—4 P.M. Dr. W. Ewart: Clinique. (Medical.) 5.15 P.M. Lecture:—Dr. G. F. Still: Head-nodding and other Curious Movements in Children.

POST-GRADUATE COLLEGE (West London Hospital, Hammersmith-road, W.).—10 A.M. Medical and Surgical Wards. 10.30 A.M. Dr. Moullin: Gynæcological Operations. 11 A.M. Minor Operations. 2 P.M. Medical and Surgical Clinics. 2.30 P.M. Operations. Skin. Throat, Nose, and Ear. 5 P.M. Dr. S. Taylor: Cerebral Hæmorrhage—Before, During, and After an Attack.

LONDON SCHOOL OF CLINICAL MEDICINE (Dreadnought Hospital, Greenwich).—2.30 P.M. Operations. Dr. R. T. Hewlett: Medicine. 3.15 P.M. Mr. Cariess: Surgery. 4 P.M. Mr. M. Morris: Diseases of the Skin. Out-patient Demonstrations:—10 A.M. Surgical and Medical. 12 noon. Skin.

NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC (Queen-square, Bloomsbury, W.C.).—3.30 P.M. Clinical Lecture:—Sir Felix Semon.

NORTH-EAST LONDON POST-GRADUATE COLLEGE (Tottenham Hospital, N.).—4.30 P.M. Pathological Demonstration:—Dr. G. B. Price: Non malignant Ulcers of the Stomach and Intestine.

ROYAL INSTITUTE OF PUBLIC HEALTH (37, Russell-square, W.C.).—5 P.M. Dr. C. E. Harris: The Manufacture and Sophistication of Potable Spirits. (Lecture II.)

WEDNESDAY (20th).—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—4 P.M. Mr. P. J. Freyer: Clinique. (Surgical). 5.15 P.M. Lecture:—Mr. B. T. Collins: Cataract (with lantern slide demonstration).

POST-GRADUATE COLLEGE (West London Hospital, Hammersmith-road, W.).—10 A.M. Medical and Surgical Wards. Medical Diseases of Children. 11 A.M. Minor Operations. 2 P.M. Medical and Surgical Clinics. 2.30 P.M. Operations. Diseases of Women. 3 P.M. Mr. Bidwell: Intestinal Surgery 5 P.M. Dr. Beddard: Practical Medicine.

LONDON SCHOOL OF CLINICAL MEDICINE (Dreadnought Hospital, Greenwich).—2.30 P.M. Operations. Dr. F. Taylor: Medicine. 3.15 P.M. Mr. M. Robson: Surgery. 4 P.M. Mr. Cargill: Ophthalmology. Out-patient Demonstrations:—10 A.M. Surgical and Medical. 11 A.M. Eye.

THURSDAY (21st).—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—4 P.M. Mr. Hutchinson: Clinique. (Surgical). 5.15 P.M. Lecture:—Sir J. McFadyean: Anthrax.

POST-GRADUATE COLLEGE (West London Hospital, Hammersmith-road, W.).—10 A.M. Medical and Surgical Wards. Dr. Low: Tropical Medicine. 11 A.M. Minor Operations. 2 P.M. Medical and Surgical Clinics. 2.30 P.M. Operations. Eye. 4 P.M. Mr. Keetley: Demonstration in Surgical Wards. 5 P.M. Mr. S. Edwards: Urinary Cases.

LONDON SCHOOL OF CLINICAL MEDICINE (Dreadnought Hospital, Greenwich).—2.30 P.M. Operations. Dr. G. Rankin: Medicine. 3.15 P.M. Sir W. Bennett: Surgery. 4 P.M. Mr. M. Davidson: Radiography. Out-patient Demonstrations:—10 A.M. Surgical and Medical. 12 noon. Ear and Throat.

CHARING CROSS HOSPITAL.—4 P.M. Dr. Clogg: Demonstration (Surgical). (Post-Graduate Course.)

HOSPITAL FOR SICK CHILDREN (Gt. Ormond-street, W.C.).—4 P.M. Lecture:—Mr. Waugh: The Surgical Treatment of Empyema.

ROYAL INSTITUTE OF PUBLIC HEALTH (37, Russell-square, W.C.).—5 P.M. Special Lectures:—Lieut.-Col. R. J. S. Simpson: Some Features of the Occurrence of Enteric Fever in the British Army.

FRIDAY (22nd).—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—4 P.M. Mr. A. Lawson. Clinique. (Eye.)

POST-GRADUATE COLLEGE (West London Hospital, Hammersmith-road, W.).—10 A.M. Medical and Surgical Wards. Practical Anæsthetics. 10.30 A.M. Gynæcology. 11 A.M. Minor Operations. 2 P.M. Medical and Surgical Clinics. 2.30 P.M. Operations. Skin. Throat, Nose, and Ear. 3 P.M. Dr. S. Taylor: Demonstration in Medical Wards. Mr. Bidwell: Intestinal Surgery. 5 P.M. Finsen Light (with lantern slides).

LONDON SCHOOL OF CLINICAL MEDICINE (Dreadnought Hospital, Greenwich).—2.30 P.M. Operations. Dr. R. Bradford: Medicine. 3.15 P.M. Mr. McGavin: Surgery. Out-patient Demonstrations:—10 A.M. Surgical and Medical. 12 noon. Skin.

NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC (Queen-square, Bloomsbury, W.C.).—3.30 P.M. Clinical Lecture:—Mr. M. Gunn: Ocular Movements and Paralysis.

NORTH-EAST LONDON POST-GRADUATE COLLEGE (Tottenham Hospital, N.).—4.30 P.M. Lecture:—Dr. R. P. Brooks: Glaucoma.

SATURDAY (23rd).—POST-GRADUATE COLLEGE (West London Hospital, Hammersmith-road, W.).—10 A.M. Medical and Surgical Wards. 11 A.M. Minor Operations. 2 P.M. Medical and Surgical Clinics. 2.30 P.M. Operations. Diseases of Women.

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(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, June 14th, 1906.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Rainfall.	Solar Radia in Vacuo.	Maximum Temp. Shade.	Min. Temp.	Wet Bulb.	Dry Bulb.	Remarks.
June 8	30·20	E.	...	117	74	53	50	60	Fine
,, 9	30·25	E.	...	116	73	56	55	61	Fine
,, 10	30·27	N.E.	...	111	69	52	53	57	Fine
,, 11	30·24	N.E.	...	110	71	50	49	52	Overcast
,, 12	30·19	ENE	...	119	75	49	54	57	Overcast
,, 13	30·09	E.	...	80	62	50	50	52	Overcast
,, 14	30·15	N.E.	...	64	54	49	49	51	Cloudy

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